

Tests

DISHWASHERS

DIGITAL CAMCORDERS

BUTTER AND SPREADS

FOOD STORAGE

# CHOICE

Independent information for smart consumers

**WHITENING  
TOOTHPASTE**

Does it work?

**COTS**

Half failed  
safety tests



**Want a  
camera with that  
phone?** 38 models tested

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## Cot safety is taking too long

Five out of 10 cots passed all the standard's safety requirements in our latest test (page 28). That's not very good — after all, if a cot doesn't pass, legally it shouldn't be on sale — but it's an improvement on previous results. In the test before this, only one out of nine passed.

I've lost count of how many editorials I've written about cots in the years I've been editor of CHOICE. When I first started, cot safety wasn't even covered by a mandatory standard — babies' safety was virtually left to the goodwill of manufacturers to make their products as safe as they deemed practical, and to pass standard tests if they wanted to. CHOICE lobbied for a mandatory standard for years, and finally in 1998 it became illegal to sell a cot (even a secondhand one) that doesn't pass the safety tests.

We've kept testing them since then, but no group of tested cots has ever achieved a 100% pass rate. We're sure manufacturers are trying, but it seems their systems just aren't delivering the goods a lot of the time.

And what about all those cots that don't pass and shouldn't be on sale, yet are still freely available in the shops? The ACCC is the body responsible for monitoring, and CHOICE thinks it should be making more rigorous efforts to keep non-complying cots out of the stores in the first place.

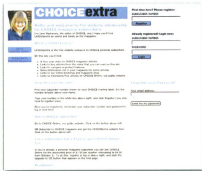
It dumbfounds us every time we test cots and still find a high proportion of safety failures, despite legislation designed to stop them. The day we get a 100% pass rate we'll throw a very big party. In the meantime, those members of society least able to help themselves still need all the help they can get both from CHOICE and from vigilant parents to ensure they can get a safe night's sleep.



Jane Mackenzie,  
Editor

## FOR MEMBERS ONLY

[www.CHOICEextra.com.au](http://www.CHOICEextra.com.au)



Look out for the  symbol in magazine articles — it indicates there's extra info on CHOICEextra. This month you have access to our dishwasher and mobile phone interactive "compare-a-product" tools. To use this free website you'll need to log in with your subscriber number, which is the number directly above your name on the mailing label that comes with the magazine.

The free website exclusive to CHOICE magazine personal subscribers, with a four-year index and links to many articles online.



All you need is the model name and number you want to buy, the price you want to beat, and your CHOICE subscriber number (from the mailing label with the magazine). CHOICE Shopper is available to personal subscribers only.

**Call**  
**1300 360 655**





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January/February 2005

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It's now standard with most GSM phones: 28 out of 38 on test have one.

*Photo: Ute Wegmann. Thanks to the Courthouse Hotel, Newtown.*

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## UPDATE

## WASHING MACHINES

CHOICE, September 2004

In this article, based on manufacturer information we listed the **WHIRLPOOL AWM 5100's** price as \$782 and the **WHIRLPOOL Sixth Sense AWM 8121's** as \$968. The manufacturer has now told us the recommended retail prices are \$1032 and \$1278 respectively.

## CHOICE CUTS

CHOICE, December 2004

On page 6 we reported that the Federal Court had found Lux Pty Ltd in breach of the Trades Practices Act in reference to the door-to-door sale of a vacuum cleaner. Lux has informed us it's appealed against the finding.

## SPEEDING AND OTHER TRAFFIC FINES

If you've been fined or cautioned for speeding or any other traffic offence we'd like to hear from you:

- If you were let off with a caution, what were the circumstances?  
If you were fined:
- Please outline the circumstances and for what offence you were fined.
- What was the fine?
- Was there anything you found unfair about the fine or the situation?

We'd be especially interested if you objected to the fine:

- Why did you object (for example, you weren't driving the vehicle at the time of the offence)?
- What steps did you take, such as viewing the photograph from the speed camera?
- Did you present your case to a magistrate?
- Did you have trouble in the process or was there anything that was particularly difficult?
- What was the outcome?

Please write to [trafficfines@choice.com.au](mailto:trafficfines@choice.com.au) or *Traffic fines*, 57 Carrington Road, Marrickville 2204, by February 21. Thanks for your help.

## Hearts, compost and chocolates

Here's a Valentine's day story everyone can enjoy: by choosing chocolates and biscuits from certain companies you could not only win a heart, but also help preserve the environment. How? Because they're packaged in eco-friendly **PLANTIC**, a new plastic, made from plants, that won a Eureka science award (the Aussie science Oscars) in 2004.

Based on modified cornstarch, **PLANTIC** is biodegradable, non-toxic to humans and the environment, based on a renewable resource and, best of all, decomposes rapidly, dissolving instantly on contact with water – as you can see from our before and after photos, right, taken just 20 seconds apart to show how quickly it dissolves when sprayed with water. (And before you ask, the purple residue is biodegradable food dye.) That all adds up to a lot less litter because the ideal way to dispose of it is to put it in your compost.

**PLANTIC** was developed by the Australian Cooperative Research Centre for International Food Manufacture and Packing Science and has now been made available by Plantic Technologies, an Australian packaging company.

Cadbury Schweppes was the first to come on board: its Milk Tray Deluxe chocolates are packed in a **PLANTIC** tray. Freedom Foods has



also signed on and packs its entire biscuit range in **PLANTIC** trays, and now some Pink Lady Chocolates have joined in (look for the **PLANTIC** logo on their box). **PLANTIC** is also in discussion with other confectioners and some cosmetics companies, so look out for this new packaging that you can compost as you go.

## Action taken on unsafe stoves

Following our recent article exposing the problem of stoves tipping over (CHOICE, November 2004), we received feedback from consumers who'd checked their old stove and found it wasn't stable. Now we're pleased to see **ELECTROLUX HOME PRODUCTS**, the current manufacturer of

ELECTROLUX has issued a Product Safety Alert for **SIMPSON** stoves manufactured between 1992 and 2000 and **WESTINGHOUSE** stoves manufactured between 1983 and 2000 that were sold with stabilising brackets attached to the rear. It says some brackets may have never been fitted or, if fitted, may have inadvertently been disengaged.

The Product Safety Alert (see right and page 49) asks householders to check their stoves and if they find the brackets are missing, or if the stove fails to engage with the brackets, to call 1800 063 009 toll-free between 8 am and 5 pm, Monday to Friday. **ELECTROLUX** has education packs with installation instructions and stickers, and new brackets available for those who discover they have none. Tenants should alert their landlords to this problem and its solution.

[illegible]

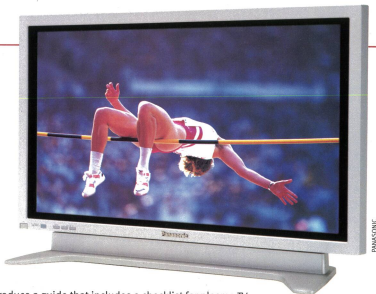
## Plasma TV sellers hide their light

In October 2004 the NSW Office of Fair Trading commissioned a shopping exercise in retail outlets around Sydney and Newcastle. What they found should stand as a warning to anyone considering buying a plasma TV.

Around one in three shoppers is likely to miss out on crucial information if they rely entirely on a salesperson. Even more alarmingly, the well-known disadvantages of plasma TVs, such as burn-in or dead pixels, were hardly mentioned at all. Only one in 10 salespeople brought them up without being prompted, and even when they were prompted only half properly explained the negative aspects. Not surprisingly, positive aspects were mentioned 90% of the time once the shopper prompted.

Along with this reticence to mention plasma TVs' downsides was a failure to bring up the extra costs, such as stands, TV tuner, brackets and speakers. All of these can add up to a substantial additional outlay to an already expensive purchase. Only just over a third of salespeople mentioned them upfront.

This has prompted the NSW Office of Fair Trading to



produce a guide that includes a checklist for plasma TV buyers and some helpful information on this technology. No matter where you live in Australia, we advise you get hold of this guide if you're thinking of purchasing a plasma TV. You can do so at [www.fairtrading.nsw.gov.au/shopping.html](http://www.fairtrading.nsw.gov.au/shopping.html); type 'plasma' in the search box. Or you can find it on [www.choiceextra.com.au](http://www.choiceextra.com.au) along with our article on plasma screens (from the March 2004 issue).



## Learn resuscitation — save lives

Summer, heat, pool ... fun and laughter should come next, but for far too many families each year, the backyard pool brings death and tragedy.

Although in the last financial year the number of toddler drownings in Australia was down by 26% on the previous five-year average, drowning is still the biggest killer of preschool-aged children who die in accidents.

During the last financial year, 40 of the 277 people who drowned in Australia hadn't even reached five years of age. Almost half of these toddlers had wandered or fallen into a swimming pool.

The Royal Life Saving Society Australia, which compiled these statistics, urges parents and carers to supervise their children constantly (within arm's reach) and have them participate in water

familiarisation activities. Pool owners must fence their pools and ensure safety gates are kept closed. And parents should learn resuscitation.

To help people learn cardio-pulmonary resuscitation (CPR), Life International Training, an Australian-registered training organisation specialising in first aid, has produced a CD-ROM that could help you learn these vital skills at home and in your own time. (Note that CHOICE hasn't assessed it or compared it with hands-on training.)

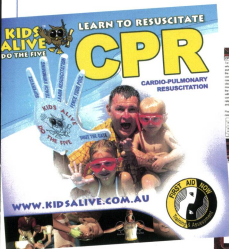
When using the CD-ROM, you control a virtual first aider with the keyboard and apply CPR to a virtual victim, while the computer measures how you perform the three most important things: the number of chest compressions, interspersed breaths and the depth of compressions.

The CD-ROM costs \$39.95 (plus \$8.80 postage and handling) and is available from Kids Alive ([www.kidsalive.com.au](http://www.kidsalive.com.au) or phone (07) 3878 1007). It contains the CPR element of Life International Training's more comprehensive and nationally recognised computer-based *First Aid Now* course.

Olympic swim coach and anti-child-drowning campaigner Laurie Lawrence's 'Kids Alive — Do the Five!' program is a public education initiative aimed at reducing the risk of children drowning.

Mr Lawrence has challenged every household in Australia this summer to become CPR-competent. At least one family member should be capable of administering CPR, and not just in homes with pools. Many other bodies of water can also pose a threat to a youngster, such as dams, creeks, rivers, fishponds and even nappy buckets.

So, this summer, take heed of Kids Alive's simple message: "Fence the pool, shut the gate, teach your kids to swim, it's great! Supervise, watch your mate — and learn how to resuscitate!"



## When prices start from ...

When you see a travel deal advertised with a price "from \$460", you wouldn't expect it in fact to cost you \$939, more than twice the advertised price, would you?

One of our Sydney readers told us he saw what looked like a great offer advertised on a Sydney newspaper's website: seven nights in Port Douglas and airfare from \$460. But on inquiring he learned that the offer in question was based on free flights from Brisbane to Cairns and return, not from Sydney, as he'd assumed.

"I would have thought that *from* might have meant that the price varied by time of year or quality of accommodation," he said. "However, the price only applied from Brisbane, even though the advert was on a Sydney paper's website. That's a little misleading, isn't it?"

We thought so too, and checked with the Australian Competition and Consumer Commission (ACCC), which recommends that the conditions upon which a "from" price is calculated should be disclosed.

The ACCC hadn't received many complaints about similar advertising, but was working at the time on guidelines for price advertising in the airline and travel industry to ensure that consumers are fully informed.

This case highlights the need for such guidelines, so travel advertising becomes less ambiguous.

If you think you've been misled when the travel deal you saw advertised "from \$" cost much more in the end, let us know.



## CORRECTION

### ELECTRIC SHAVERS

CHOICE, November 2004

In this article we said you can't charge the **BRAUN Activator 8585** shaver without its cleaning and charging station. In fact you can charge this shaver directly from the mains, though its instructions don't make this at all clear.

## How has CHOICE changed your life?

OK, so maybe it wasn't that dramatic. But has something you read in CHOICE affected your life or habits in any way, large or small?

For example, when we asked around the CHOICE office, a large number of staff now use **DUO**, the Best Buy laundry detergent out of the last two tests. And many of us no longer put up with any nonsense from our banks and credit card providers — all those articles about fees and your rights have had an effect.

So if CHOICE has made you or your family change something you do, large or small, we'd like to hear about it. Email [changedmylife@choice.com.au](mailto:changedmylife@choice.com.au) or write to *Changed my life*, CHOICE, 57 Carrington Road, Marrickville 2204, by March 1, 2005. We'll look forward to hearing from you.

## WORLD CONSUMER SNAPSHOT

### LOSING CALORIES WHILE YOU SHOP

Shoppers at Tesco in the UK can now keep track of the calories they burn while pushing a reluctant trolley through the supermarket aisles, reports the UK consumer magazine *Which?*: "A trolley that's hard to push so you can burn more fat — Tesco's contribution to the nation's fitness."

### CONDOMS TO GET HER

German words can be rather long and often need to be split at the end of a line, especially in narrow magazine columns. But you need to know what you're doing when you split a foreign-language word — a hyphen inserted at the wrong spot can completely change the meaning, as happened in *Test* magazine's article on condoms, where the **DUREX Come 2gether** brand turned into a "Come 2get-her".

### BUZZ OFF!

If you've ever wondered why some people seem to attract mosquitoes more than others, the US *Consumer Reports on Health* offers some advice. Some people apparently emit or wear more substance bugs love. Carbon dioxide, body heat, odour and moisture are the main insect magnets, and physical exertion, sweat, scented products and dark clothing (which can capture heat) can all boost your insect allure by magnifying those factors, reports the magazine.

So to keep bugs at bay, don't wear fragrances, wear light-coloured clothes, cover exposed skin, and use a repellent containing DEET on exposed skin or one containing permethrin on clothes.

Don't bother with insect repellents that contain citronella oil — our previous tests have found them quite ineffective. And now our counterparts in Germany have found a new product equally ineffective. Insect sticking plasters are claimed to protect you from mosquitoes — just two plasters on your wrist and ankle area are supposed to keep them at bay.

But for the five trialists who tried them out for *Test* magazine, they failed to deliver. Within 10 minutes each trialist registered at least five mosquito bites, and still more itching after an hour's wear. What's more, three of the trialists had slightly reddened skin where the plasters had stuck.



# yourletters

## TV screens and optimal viewing distance

In your article on widescreen TVs (CHOICE, October 2004) you mention the optimum distance for viewing is five times the diagonal measurement. However, this applies to standard TVs with a 4:3 aspect ratio; for a 16:9 aspect ratio this is more likely to be four times. This is because when comparing widescreen TV with the same diagonal dimension as a normal TV, the picture is only 82% as high but has the same number of lines. Objects viewed on the 76 cm widescreen TVs you tested are actually smaller (about 10%) than the same object viewed on a standard 68 cm TV.

One would also expect that the optimal distance to diagonal measurement can be further reduced when viewing a high-definition TV (HDTV) picture.

I would like also to mention the sound quality of TVs, which in some cases is very good, but is no substitute for channelling the audio through a reasonable-quality sound system with separate speakers. The width of a TV doesn't give much separation of the stereo channels, and packaging speakers into the TV cabinet must involve some design compromises. And often the TV is in a cabinet, which can add its own, usually unwanted, colour to the sound.

Alan Cashin  
Cardiff, NSW



*Alan makes a good point about widescreen picture size relative to the diagonal screen measure, and we'll be changing our recommended viewing distance for 16:9 (widescreen) TVs in future articles to four times the diagonal rather than five times.*

*You can view a true high-definition screen from even closer if you wish, but there's screen size relative to angle of view to consider: too close and it becomes difficult to see the whole picture in one go, which can be tiring (like sitting in the front row at the movies).*

*We check the sound quality directly from the sets and the best do a reasonable job. Feeding the sound through a good sound system is likely to improve it; unfortunately the results of our recent test of cheap home theatre systems (see CHOICE, December 2004) showed that many of those were unlikely to improve the sound.*

## Acne treatment bleaching blues

After reading your story on acne treatments (CHOICE, August 2004), in which you recommend products with the active ingredient benzoyl peroxide, I thought I should share with you my recent experience with a 5% benzoyl peroxide acne treatment gel.

The product information carried a warning that it could bleach dyed fabric and hair, so I took great care to wash my hands thoroughly after I put it on in the morning. However, after only one use I noticed that a couple of my towels and a face washer had bleach marks on them. I thought it might have been due to a bathroom cleaning product so I continued to use the treatment for a few more days until I noticed that the bleaching on my towels was

## THUMBS UP!



■ Artist Thomas Gengenbach of Glen Waverley, Victoria, discovered a tube of 'burnt sienna' oil paint was a different colour and consistency from the previous tubes he'd bought — and he had a half-finished masterpiece in progress. The manufacturer, **ART STRETCHERS**, apologised, explaining they'd had to change the manufacturing process for that paint. Two days later he received a free tube from the same batch as the last tube he'd used.

getting worse, and concluded it must have been the acne gel (which a spot test confirmed).

It seems that when I washed my make-up off at night, the remaining benzoyl peroxide was wiped off onto the towels.

After ruining a complete set of towels, I didn't want to use the product any more. When I took it back to the salon I showed them the towels and they were amazed and said that they had never had any complaints before. I was amazed that something I was putting on my face could do that to good-quality bath towels.

Clare Smith  
Northbridge, WA

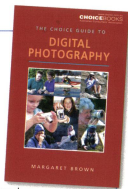
Clare's problem isn't uncommon, and we've seen reports of similar experiences. Blue dyes (which are also used in other colours, like green and brown) are particularly susceptible to benzoyl peroxide bleaching, leaving pink, orange or beige spots and patches on clothing, sheets, pillowcases and towels. Benzoyl peroxide is an effective and safe acne treatment, but care is needed to prevent contact with dyed fabrics: using a white towel could solve the problem.

## LETTER OF THE MONTH

We want to hear from you — your experiences help our research and often let other readers know about scams and rip-offs. Positive outcomes you've had to a complaint you took to a manufacturer, retailer, importer or tradesperson interest us too. Address these letters to *Thumbs Up* at the address on page 2.

To thank you for writing to us, *Your Letters* awards a prize of a CHOICE book to the 'Letter of the month'. This month's winner, Alan Cashin of Cardiff, NSW, receives *The CHOICE Guide to Digital Photography* or any other book of his choice from *Consumer Bookshelf*, pages 47–48.

We're sorry we don't have the resources to answer all your letters personally, and in the magazine we may edit them or print only an extract. See page 2 for how to reach us.



# Want a camera with that?

New mobile phone models are packed with features and functions you may love — or never use.

## IN A NUTSHELL

- *On test: 38 GSM phones.*
- *Taking and sending photos by phone is the new must-have and most new phones can now do it (28 in this test), so we've included a picture quality score in our overall rating.*
- *Most of them do their main job — taking and making phone calls — well. Which model is the best for you depends on your needs and budget, and what's available with the plan you choose.*

**M**odern mobile phones can do much more than let you make and receive phone calls. A digital camera is more or less standard on new models, email and organiser functions turn them into a mobile office, and most offer a number of games for entertainment.

## MAIN RESULTS

■ **Picture quality:** A digital camera is standard on most new phone models, but the typical resolution is only 0.31 megapixels. This may be fine for pictures displayed on a small phone screen, but not if you enlarge them — for example, on a computer screen.

However, if taking and sending reasonably good photos is a priority for you in a new phone, check the table (page 12) for models with a more useful resolution of around one megapixel. The SHARP GX30 and SIEMENS S65 scored best for picture quality, with a resolution of 0.98 and 1.23 megapixels respectively.

■ **Sound quality:** The overall standard of sound quality is good, and factors such as network or atmospheric conditions can have a bigger impact than the difference between phones.

■ **Battery** capacity has generally managed to keep up well with increasing power demands for new features and functions, such as a large colour display.

■ **Sensitivity:** Some models can deal better with a weak signal than others. If you use your phone a lot in areas with poor coverage, look for a model with a comparatively high sensitivity score.

■ **Ease of use/ergonomics:** Basic everyday functions are usually easy enough to manage with most of the tested models. However, the phones have an increasing number of sometimes complex functions, and often the menus to access and manage those functions aren't very intuitive.

A small phone can be carried around more easily but also often means small keys, and some modern keypad designs have moved away from the classic key layout. Some models scored poorly in our ergonomics assessment because of it. So check the models you're interested in before you buy, and see what you're comfortable with.

■ **Durability:** All the tested phones are tough little critters — we found some physical damage in our severe tumble test, but none of the phones was left unusable.

## Which network?

The tested models can be used on the Australian digital GSM networks from Telstra, Optus and Vodafone. And GSM is also widely used overseas, so chances are you can take your mobile with you and use it when you travel if you wish. (This is called roaming — check with your network provider which countries it has roaming agreements with, and how much it'll cost you.)

If you use your mobile a lot outside major centres in Australia, GSM may not be the best choice for you because of its limited coverage in more remote areas compared to the CDMA network. CDMA allows further transmission from tower to phone than GSM, which is why it's claimed to give better coverage for people outside metropolitan areas.

There are two CDMA network providers in Australia: Telstra runs the main network, promising twice the coverage area of its GSM network; Orange covers major cities, and uses the Telstra network elsewhere. However, you can't use a CDMA phone overseas.

We also tested how well the phones cope with water and humidity (see note 9, page 11, for details). While some models had problems right after the test, all but the **ALCATEL OT332** recovered once they were allowed to dry again.



## PHONE RECYCLING

If you have a phone, battery or accessories you want to get rid of, don't throw them in the bin. That's especially true for older-style NiCad batteries, which shouldn't end up in landfill because cadmium is toxic and might leach into waterways and damage the environment. None of these newer models has a NiCad battery.

However, all battery types and the phone's circuit boards and plastic housing contain resources that can be recovered and reused. There's a free recycling scheme initiated by the Australian Mobile Telecommunications Association. You can return your old phone, battery and accessories to any retail outlet featuring the symbol pictured above.

## What to buy

The top models are profiled in rank order. Prices are recommended retail, as provided by manufacturers in November/December 2004.

These two phones were the overall top scorers and should be satisfactory all round, but bear in mind that the **SAMSUNG** doesn't take photos.

### NOKIA 6230

Price: \$899

Solid performer across all aspects, and packed with features and functions.

### SAMSUNG SGH-E800

Price: Not available

A small and lightweight phone with solid performance across all aspects, but comparatively low on features (for example, it doesn't have a camera).



## For photos

If your top priority is taking and sending reasonable photos, the following two models rated pretty well overall and their built-in cameras scored best for picture quality. However, you could find the comparatively short battery life on both frustrating.

### SIEMENS S65

Price: \$899

Performs well in most aspects, and has the second-highest picture quality score. However, its battery doesn't last as long as others.

### SHARP GX30

Price: Not available

Clearly the best for picture quality, but only an average performer overall, with a comparatively short battery life and poor ergonomics (using keys and menus).



## WHAT ABOUT THE REST?

You're likely to be happy with how most of the other tested models work if they have the features and functions you want. Which model you choose will depend on your budget and needs — and probably on which are available with the phone plan you want.

If a particular performance aspect, a specific feature or small size is essential for you, a model further down the table than the top performers, but which doesn't have a major weakness, may be the one for you. For example:

- If you use your phone a lot in areas with poor network coverage, the **NOKIA 7610** and **SAMSUNG SGH-E800** scored the best for sensitivity.
- If long talk time is important to you, you can upgrade to a higher-capacity battery with most models. The model with the longest talk time using the standard battery was the **SONY ERICSSON Z1010** (but it's also the heaviest model in the test).
- If you want to use your phone as a mobile office, the **SONY ERICSSON Z1010** is the pick of the bunch.

## Features and functions

### All tested models have

- **Colour display**, except the **NOKIA 1100** and **SONY ERICSSON T105**.
- **Vibration alert**: You can set the phone to vibrate instead of ring — useful if you need to have your phone on while you're in a meeting or restaurant, where a ringing phone would bother others.
- **Polyphonic ring tones**. You can download additional ones with all but the **SONY ERICSSON T105**.
- **Keypad locking**.
- **Li-ion or Li-polymer battery** (see *Phone recycling*, page 9, for more on batteries).
- **Dual-band**: They can operate in both the 900 MHz and 1800 MHz frequency bands used by Australian GSM networks.
- **SMS** (short message service) or 'texting' allows you to send and receive short text messages. **Predictive text input** (where your phone is programmed to anticipate what you're likely to type once you've started) can assist in typing them more quickly.

- **Alarm** to wake you up or remind you of appointments.
- **GPRS** (except the **ALCATEL OT332**, **NOKIA 1100** and **SONY ERICSSON T105**): This stands for 'general packet radio service', and is a faster version of WAP (see below). It allows you access to web-like applications available over the mobile network. You can use your mobile to receive and display information on certain topics (such as the weather, sports results or the share market), buy goods or book tickets, and send and receive email. Information can be accessed more quickly than with WAP, and you're charged for the amount of information you download rather than the time you're connected.
- **WAP** (except the **NOKIA 1100**): This stands for 'wireless application protocol', and gives you access to the same functions as GPRS, above. However, WAP is quite slow, and you're charged for the time you're connected to download information.

*Mobile phone jargon decoder* (below) deciphers some even more esoteric acronyms you might come across when buying a mobile phone.

### Features in the table (see page 13):

- **Tri-band** models can be used on the 1900 MHz

## Mobile phone jargon decoder...

...Or how not to be bamboozled when you're buying.

■ **3G**: Third Generation or 3G describes wireless communication involving video phone calls and sophisticated internet services. There's currently only one network in Australia: 3. However, video calling (including international calls), information services and some messaging services are only available in 'video zones' in most parts of Sydney, Melbourne, Brisbane, Gold Coast, Adelaide and Perth.

■ **I-mode**: Information mode, a standard for data services (such as email, picture and video messaging, and a range of content) on a suitable GSM mobile phone.

■ **Bluetooth**: Wireless radio technology that allows a range of electronic devices such as mobile phones, computers and PDAs to easily communicate with each other over a range up to 10 metres.

■ **Infrared (IR) port**: Allows easy wireless data transfer to your computer.

■ **EMS**: Stands for enhanced message service, and allows you to send and receive words, pictures, animation and sound clips.

■ **MMS**: This stands for multimedia messaging service and allows you to add your own images, video clips and sound to text messages.

■ **IMEI**: This stands for international mobile equipment identifier, a 15-digit number found on the back of GSM phones (usually under the battery), and used to identify them. Every mobile phone manufactured has a unique IMEI number programmed electronically into it that's recorded along with the phone number when registering the phone to a network. The number can be used by the service provider to block the use of a stolen or lost phone.

■ **ESN**: Stands for electronic serial number, an alphanumeric number used to identify a CDMA phone. It's essential to register the ESN and telephone number with the network in order for the phone to be operational.

■ **CND**: This stands for calling number display, also known as Caller ID. It's a network feature that allows the caller's phone number to be displayed on the screen of the receiver's phone before it's answered (as long as the caller doesn't have a silent number).

■ **mAh**: Milliamperehours — the measurement used for the capacity of a battery.

■ **Roaming**: Allows you to make and receive calls with your GSM phone, as well as sending SMS, while you're travelling overseas in countries your Australian network provider has a roaming agreement with. Check with your provider for details and costs.

Also, you're roaming when you use the Telstra CDMA network with your Orange CDMA phone (it'll tell you on the display).

■ **Quad-band**: As for tri-band (see *Features and Functions*, above), plus the phone can also operate on the 850 MHz frequency band used in parts of the US and Canada.

■ **Subscriber Identity Module (SIM) card**: This is the computer chip that goes into a GSM phone to operate it. The card contains your telephone number, a host of details enabling you to make and receive calls, and stores information such as phone numbers and text messages.



frequency band used in the US and Canada as well as on the two bands available in Australia (see *Dual-band*, left) — essential if you're planning to use your mobile there.

■ **Hands-free use:** Models with this feature have a speakerphone that allows you to make a call without holding the phone. This can be useful when you're driving, for example (although you're not recommended to drive at all while making a long or involved call), or when several people want to listen to a call.

■ **Voice dialling:** Allows you to record a word (such as the name of a person) together with a phone number, and to dial the number by saying that word.

■ If your phone has **voice recording**, you can also record voice messages and send them on, and record voice memos and reminders. Some models also allow you to record your **talk partner**.

■ Most new phone models come with a digital camera, some of which also allow you to record short **video clips**.

■ If you want to use your phone as a mobile office, look for a model with an **IR (Infrared) port** for easy data transfer to your computer, **email** capability and **organiser** functions.

LUKE WICKHAM



## Notes to the table, overleaf

### Testing changes

As most phones can now take photos, we've started to include a picture quality score in our overall rating. This means we had to recalculate the overall scores for a number of models tested earlier this year, but

### 4 Everyday use/ergonomics/SMS score

A user panel assessed the following:

■ Instruction manual.

■ Everyday use (such as ease of answering a call, storing a number into memory and dialling a number

### 9 Durability score

■ **Shock resistance:** We put the phones in an 80 cm diameter barrel that was then turned, simulating falls from, say, a table or out of a shirt pocket. After five, 15 and 25 turns the phones were checked for damage.

maximum of 50 falls. This is a fairly but no phone was permanently damaged

instance: We stored the phones in hot, ions, and carried out a rain test.

ship: An assessment of the build quality

### 156

d how long the batteries lasted in various a network simulator. The value in this e average of all the tested scenarios.

; and functions, far left, for an explanation

### resolution

ison, proper digital cameras have a at least two megapixels.

### SAR value

absorption rate of the phone (the nergy per kilogram of body weight that's 'the body when you're using the phone), y the manufacturer. There's currently no dence that mobile phone radiation is CHOICE, June 2004). However, if you're ou may want to choose a model with a

# 3 FREE magazines!

See over for details



## PERFORMANCE

| Make / model (in rank order) | 1 Overall score (%) | 2 Battery score (%) | 3 Sensitivity score (%) | 4 Everyday use score (%) | 4 Ergonomics score (%) | 4 SMS score (%) | 5 Sound quality score (%) | 6 Picture quality score (%) | 7 Versatility score (%) | 8 Portability score (%) | 9 Durability score (%) |
|------------------------------|---------------------|---------------------|-------------------------|--------------------------|------------------------|-----------------|---------------------------|-----------------------------|-------------------------|-------------------------|------------------------|
| NOKIA 6230                   | 68                  | 66                  | 75                      | 74                       | 63                     | 75              | 52                        | 58                          | 86                      | 69                      | 53                     |
| SAMSUNG SGH-E100             | 68                  | 64                  | 74                      | 84                       | 55                     | 75              | 69                        | na                          | 39                      | 81                      | 67                     |
| SAMSUNG SGH-P510             | 66                  | 80                  | 66                      | 77                       | 52                     | 73              | 65                        | 43                          | 50                      | 57                      | 79                     |
| SAMSUNG SGH-X100             | 66                  | 67                  | 75                      | 79                       | 64                     | 71              | 54                        | na                          | 33                      | 74                      | 74                     |
| ALCATEL OT756                | 65                  | 71                  | 75                      | 71                       | 56                     | 61              | 62                        | 44                          | 66                      | 70                      | 62                     |
| NOKIA 5140                   | 65                  | 64                  | 75                      | 73                       | 71                     | 68              | 52                        | 41                          | 74                      | 64                      | 71                     |
| SAMSUNG SGH-D410             | 65                  | 74                  | 75                      | 80                       | 57                     | 74              | 54                        | 45                          | 56                      | 54                      | 64                     |
| NOKIA 3120                   | 64                  | 62                  | 71                      | 73                       | 62                     | 75              | 56                        | na                          | 42                      | 77                      | 64                     |
| LG U8120                     | 64                  | 68                  | 70                      | 80                       | 52                     | 68              | 67                        | 39                          | 64                      | 48                      | 72                     |
| SAMSUNG SGH-X600             | 64                  | 70                  | 71                      | 78                       | 60                     | 69              | 60                        | 43                          | 42                      | 79                      | 69                     |
| SAMSUNG SGH-E800             | 64                  | 59                  | 77                      | 79                       | 59                     | 68              | 65                        | 45                          | 49                      | 67                      | 64                     |
| SONY ERICSSON Z1101          | 64                  | 78                  | 62                      | 59                       | 45                     | 65              | 52                        | 60                          | 85                      | 30                      | 78                     |
| NOKIA 3200                   | 63                  | 62                  | 66                      | 74                       | 62                     | 79              | 53                        | 42                          | 59                      | 72                      | 63                     |
| NOKIA 6610i                  | 63                  | 68                  | 63                      | 74                       | 67                     | 70              | 56                        | 34                          | 60                      | 77                      | 61                     |
| SIEMENS S65                  | 63                  | 46                  | 72                      | 70                       | 70                     | 70              | 52                        | 66                          | 73                      | 62                      | 61                     |
| SONY ERICSSON K500i          | 63                  | 66                  | 70                      | 53                       | 58                     | 66              | 57                        | 48                          | 71                      | 71                      | 66                     |
| SONY ERICSSON Z600           | 63                  | 79                  | 67                      | 67                       | 59                     | 69              | 52                        | 47                          | 55                      | 55                      | 69                     |
| MOTOROLA E398                | 62                  | 80                  | 67                      | 64                       | 59                     | 52              | 46                        | 58                          | 59                      | 56                      | 64                     |
| NOKIA 1100                   | 62                  | 77                  | 75                      | 61                       | 64                     | 64              | 51                        | na                          | 16                      | 75                      | 64                     |
| NOKIA N-Gage QD              | 62                  | 81                  | 75                      | 60                       | 39                     | 61              | 45                        | na                          | 67                      | 26                      | 73                     |
| NOKIA 6600                   | 61                  | 58                  | 68                      | 59                       | 63                     | 74              | 55                        | 58                          | 67                      | 41                      | 61                     |
| NOKIA 7610                   | 61                  | 58                  | 77                      | 58                       | 47                     | 59              | 56                        | 63                          | 73                      | 48                      | 53                     |
| SAMSUNG SGH-E700             | 61                  | 56                  | 63                      | 84                       | 56                     | 75              | 63                        | 40                          | 43                      | 76                      | 59                     |
| SHARP GX15                   | 61                  | 57                  | 59                      | 68                       | 59                     | 64              | 60                        | 52                          | 59                      | 74                      | 64                     |
| SHARP GX30                   | 61                  | 47                  | 59                      | 67                       | 38                     | 76              | 60                        | 75                          | 60                      | 53                      | 76                     |
| SONY ERICSSON K700i          | 61                  | 62                  | 69                      | 38                       | 63                     | 69              | 47                        | 56                          | 80                      | 67                      | 67                     |
| SAGEM myV-55                 | 60                  | 76                  | 66                      | 56                       | 45                     | 63              | 54                        | 43                          | 49                      | 65                      | 61                     |
| SIEMENS CX65                 | 60                  | 44                  | 65                      | 68                       | 63                     | 73              | 56                        | 51                          | 63                      | 69                      | 55                     |
| SONY ERICSSON T230           | 60                  | 51                  | 70                      | 66                       | 61                     | 60              | 59                        | na                          | 33                      | 76                      | 76                     |
| PANASONIC X70                | 59                  | 41                  | 65                      | 75                       | 50                     | 62              | 59                        | 42                          | 62                      | 74                      | 84                     |
| SIEMENS M65                  | 59                  | 45                  | 60                      | 74                       | 68                     | 70              | 54                        | 50                          | 62                      | 60                      | 66                     |
| SONY ERICSSON T630           | 58                  | 61                  | 55                      | 59                       | 60                     | 69              | 48                        | 48                          | 51                      | 70                      | 72                     |
| PANASONIC EB G51M            | 57                  | 55                  | 65                      | 78                       | 39                     | 66              | 41                        | na                          | 22                      | 80                      | 65                     |
| MOTOROLA C650                | 56                  | 56                  | 70                      | 68                       | 49                     | 46              | 60                        | 38                          | 47                      | 69                      | 52                     |
| ALCATEL OT332                | 55                  | 53                  | 70                      | 63                       | 63                     | 41              | 56                        | na                          | 23                      | 79                      | 49                     |
| SIEMENS C65                  | 55                  | 39                  | 66                      | 62                       | 63                     | 67              | 52                        | 37                          | 57                      | 71                      | 53                     |
| SONY ERICSSON Z200           | 54                  | 39                  | 60                      | 69                       | 47                     | 71              | 55                        | na                          | 23                      | 61                      | 78                     |
| SONY ERICSSON T105           | 50                  | 57                  | 62                      | 40                       | 56                     | 35              | 50                        | na                          | 13                      | 84                      | 67                     |

\* Including battery and SIM card.

\*\* With closed lid where applicable.

† Where given, it's the recommended retail, as provided by manufacturers in November/December 2004; some manufacturers didn't provide a price.

na Not applicable.

ns Not stated.

|        |                   | 11 FEATURES |            |            |              |                        |            |         |       |           | SPECIFICATIONS |             |                              |                                   |                               |             |
|--------|-------------------|-------------|------------|------------|--------------|------------------------|------------|---------|-------|-----------|----------------|-------------|------------------------------|-----------------------------------|-------------------------------|-------------|
| In (h) | Charge time (min) | Tri-band    | Hands-free | Voice dial | Voice record | Talking partner record | Video clip | IR port | Email | Organiser | Antenna        | Weight (g)* | Dimensions (H x W x D, mm)** | 12 Camera resolution (megapixels) | 13 Claimed SAR value (W / kg) | Price (\$)* |
| 81     | ✓                 |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       | ✓     | ✓         | Internal       | 98          | 103 x 45 x 21                | 0.31                              | 0.59                          | 899         |
| 99     |                   |             |            |            |              | Fixed                  |            | ✓       |       | ✓         | Fixed          | 84          | 83 x 46 x 22                 | na                                | 0.93                          | ns          |
| 141    |                   |             |            |            |              |                        | ✓          | ✓       |       | ✓         | Fixed          | 112         | 87 x 47 x 27                 | 0.31                              | 0.90                          | ns          |
| 134    |                   |             |            |            |              |                        |            |         |       | ✓         | Internal       | 85          | 110 x 46 x 20                | na                                | 0.71                          | ns          |
| 199    | ✓                 |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       |       | ✓         | Internal       | 93          | 107 x 46 x 21                | 0.31                              | 0.50                          | 499         |
| 77     | ✓                 |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       | ✓     | ✓         | Internal       | 101         | 107 x 47 x 23                | 0.31                              | 0.77                          | 639         |
| 180    | ✓                 |             |            |            | ✓            | ✓                      | ✓          |         | ✓     | ✓         | Fixed          | 116         | 98 x 49 x 25                 | 0.31                              | 0.44                          | ns          |
| 191    | ✓                 |             | ✓          |            |              |                        |            |         |       | ✓         | Internal       | 86          | 102 x 43 x 19                | na                                | 0.79                          | 259         |
| 171    |                   |             | ✓          |            | ✓            | ✓                      | ✓          | ✓       | ✓     |           | Fixed          | 127         | 96 x 50 x 25                 | 0.31                              | 0.98                          | 600         |
| 120    |                   |             |            |            |              |                        |            | ✓       |       | ✓         | Fixed          | 79          | 102 x 43 x 20                | 0.31                              | 1.51                          | ns          |
| 120    |                   |             | ✓          |            |              |                        |            | ✓       |       | ✓         | Internal       | 94          | 87 x 45 x 26                 | 0.31                              | 0.32                          | ns          |
| 137    |                   |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       | ✓     | ✓         | Internal       | 146         | 99 x 54 x 29                 | 0.31                              | 1.41                          | ns          |
| 178    | ✓                 |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       | ✓     | ✓         | Internal       | 94          | 107 x 45 x 21                | 0.10                              | 0.56                          | 349         |
| 76     | ✓                 |             | ✓          |            |              |                        |            |         |       | ✓         | Internal       | 86          | 106 x 45 x 19                | 0.10                              | 0.73                          | 439         |
| 138    | ✓                 |             | ✓          |            | ✓            |                        | ✓          | ✓       | ✓     | ✓         | Internal       | 103         | 109 x 48 x 21                | 1.23                              | 0.48                          | 899         |
| 115    | ✓                 |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       | ✓     | ✓         | Internal       | 86          | 103 x 46 x 21                | 1.23                              | 0.53                          | ns          |
| 125    | ✓                 |             |            | ✓          | ✓            | ✓                      |            | ✓       | ✓     | ✓         | Internal       | 111         | 90 x 48 x 28                 | 0.10                              | 0.16                          | ns          |
| 240    | ✓                 |             | ✓          | ✓          |              |                        |            |         |       | ✓         | Internal       | 111         | 108 x 47 x 21                | 0.31                              | 1.01                          | 599         |
| 200    |                   |             |            |            |              |                        |            |         |       |           | Internal       | 87          | 106 x 46 x 20                | na                                | 0.67                          | 189         |
| 99     |                   |             | ✓          | ✓          | ✓            | ✓                      |            |         | ✓     | ✓         | Internal       | 144         | 68 x 118 x 24                | na                                | 0.57                          | 389         |
| 88     | ✓                 |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       | ✓     | ✓         | Internal       | 125         | 109 x 58 x 24                | 0.31                              | 0.80                          | 799         |
| 87     | ✓                 |             | ✓          | ✓          | ✓            |                        | ✓          |         | ✓     | ✓         | Internal       | 119         | 109 x 53 x 20                | 1.00                              | 0.54                          | 899         |
| 134    |                   |             |            |            |              |                        |            | ✓       |       | ✓         | Internal       | 89          | 90 x 46 x 25                 | 0.31                              | 0.75                          | ns          |
| 117    | ✓                 |             | ✓          |            | ✓            |                        | ✓          | ✓       | ✓     | ✓         | Internal       | 84          | 105 x 45 x 19                | 0.31                              | 0.84                          | ns          |
| 116    | ✓                 |             | ✓          |            | ✓            |                        | ✓          | ✓       |       | ✓         | Fixed          | 111         | 95 x 49 x 27                 | 0.98                              | 0.38                          | ns          |
| 108    | ✓                 |             | ✓          | ✓          | ✓            | ✓                      | ✓          | ✓       | ✓     | ✓         | Internal       | 95          | 99 x 47 x 22                 | 1.23                              | 0.48                          | ns          |
| 158    | ✓                 |             | ✓          |            |              |                        |            | ✓       | ✓     | ✓         | Internal       | 99          | 107 x 46 x 19                | 0.31                              | 0.58                          | 179         |
| 118    | ✓                 |             | ✓          |            | ✓            |                        | ✓          | ✓       | ✓     | ✓         | Internal       | 93          | 108 x 47 x 20                | 0.31                              | 0.59                          | 449         |
| 103    |                   |             |            |            | ✓            |                        |            |         |       | ✓         | Internal       | 81          | 102 x 44 x 20                | na                                | 0.74                          | ns          |
| 100    | ✓                 |             | ✓          | ✓          | ✓            | ✓                      |            | ✓       | ✓     | ✓         | Fixed          | 91          | 88 x 47 x 25                 | 0.02                              | 0.69                          | 929         |
| 115    | ✓                 |             | ✓          |            | ✓            |                        | ✓          | ✓       | ✓     | ✓         | Internal       | 105         | 110 x 51 x 22                | 0.31                              | 0.88                          | 649         |
| 132    | ✓                 |             |            | ✓          | ✓            | ✓                      |            | ✓       | ✓     |           | Internal       | 92          | 102 x 44 x 20                | 0.31                              | 0.88                          | ns          |
| 120    | ✓                 |             | ✓          |            |              |                        |            |         |       |           | Fixed          | 69          | 80 x 43 x 19                 | na                                | 0.63                          | 346         |
| 219    | ✓                 |             | ✓          | ✓          |              |                        |            |         |       |           | Internal       | 93          | 102 x 43 x 20                | 0.31                              | 0.87                          | 369         |
| 177    |                   |             | ✓          |            |              |                        |            |         |       |           | Internal       | 78          | 98 x 42 x 22                 | na                                | 0.43                          | 79          |
| 94     | ✓                 |             | ✓          |            | ✓            |                        |            | ✓       |       | ✓         | Internal       | 87          | 105 x 47 x 19                | 0.10                              | 0.73                          | 249         |
| 155    | ✓                 |             |            |            |              |                        |            | ✓       |       |           | Internal       | 99          | 97 x 52 x 25                 | na                                | 0.94                          | ns          |
| 108    |                   |             |            |            |              |                        |            |         |       |           | Internal       | 74          | 100 x 44 x 18                | na                                | 0.84                          | ns          |

## WANT HELP CHOOSING A PHONE?

For a limited time you can have free access to our 'Pick-a-phone' tool at [www.choiceextra.com.au](http://www.choiceextra.com.au). Type in your preferences and it'll show you the models to match. Just click on 'Pick-a-phone' under 'mobile phones' in the index.



## New system to resolve financial disputes

Since August 2004 the Financial Industry Complaints Service (FICS) has had a new system for mediating between consumers and its members to attempt to resolve financial disputes.

The new service is designed to handle complaints that can be facilitated by conciliation and relationship-building between the parties, and is staffed by specialists in mediation. FICS hopes the new process will cut down the time it takes to handle complaints from years to as little as three months.

The new system of conciliation is to run side-by-side with the current case management process.

FICS is a company established and paid for by its members, who are all members of the financial services industry, including fund managers, stockbrokers, superannuation providers, insurance brokers and insurers. The conciliation service is free and is a next step if internal formal complaint procedures with a service provider don't provide a satisfactory outcome.

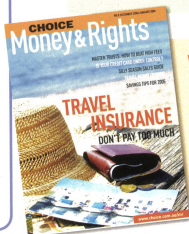
Services are Australia-wide and can sometimes be conducted over the phone, but financial limits to their jurisdiction may apply in different cases. FICS can be contacted on 1300 78 08 08.

## How we get our cash

Just for interest, Reserve Bank of Australia (RBA) research has provided some insight into the way we access our money. We're four times more likely to get cash from an ATM than via EFTPOS, and the average withdrawal from an ATM is \$169 as opposed to \$56 from EFTPOS.

It's probably no surprise that the research also reported that our banking patterns have shifted away from branches towards electronic banking.

Possible reasons put forward for the trend towards ATM usage over EFTPOS include: ATMs can be more private than EFTPOS transactions; limits on EFTPOS cash withdrawals; and you generally make an EFTPOS transaction when you've already bought something, so you probably need less cash.



## WANT MORE MONEY INFO?

CHOICE Money & Rights magazine is published six times a year and contains more information on money topics (and your consumer rights) than we could ever fit into CHOICE. To subscribe call 1800 069 552 toll-free or go to [www.choice.com.au/magazines](http://www.choice.com.au/magazines).

## Faulty investment prospectuses

You'd expect companies offering investments to understand what's required to provide sufficient information for potential investors to make informed decisions, but it seems not all do. During the 2003/04 financial year, a total of \$2.2 billion of investment schemes were withdrawn from public offer by the Australian Securities and Investments Commission (ASIC) after their prospectuses were declared faulty.

Companies generally issue a prospectus to attract investors when they want to raise money. They're not legally required to be pre-approved, but ASIC monitors the marketplace to ensure they meet certain conditions. Most importantly, a prospectus should disclose to potential investors any information they need to

determine whether the investment would be a wise one.

Some of the more common failings over the last year included:

- The company raising money didn't hold an Australian Financial Services Licence.
- Not disclosing enough financial information (in some cases none at all).
- 'Hiding' important information about the company or investment in the document.
- Inadequate disclosure of past breaches of the Corporations Act or of current litigation.
- Not representing the correct level of security behind the fundraising.

Prospectuses that fail to provide enough information can be taken out of the marketplace by ASIC, but that doesn't



mean you can consider all the rest you come across as a secure investment. The regulator only polices prospectuses to ensure they contain sufficient disclosure information — it doesn't evaluate whether the investment is a safe one.

## A GOOD SPREAD

We pick the healthiest spreads for your breakfast toast and lunchtime sandwiches.

**M**argarine's now a 'spread' and butter can come from the fridge soft enough to spread on your toast. But when you're faced with so many different spreads in the supermarket dairy cabinet it's hard to know which is the healthiest.

We checked out over 90 spreads and dairy blends and picked the healthier options.

## WHAT HAPPENED TO MARGARINE?

Only 10 of the spreads we found still have 'margarine' in their name. Old fashioned marge has almost disappeared from the supermarkets. Why?

It's not just a desire to seem trendy. The Food Standards Code defines 'margarine' as a spread containing at least 80% fat. As most spreads now have less than this, they can't be called 'margarine' and still comply with the labelling regulations (unless they're called 'margarine spreads').

## FAT FACTS

What makes a healthy spread? Expert opinion has shifted towards the view that the type of fat we eat matters even more than the quantity. Eating foods rich in **saturated** and **trans** fats increases your risk of heart disease, while replacing saturated with **mono-** and **polyunsaturated** fats lowers the risk.

We all need *some* fat in our diet. Fats provide essential fatty acids that our bodies can't manufacture. They also supply the fat-soluble

## IN A NUTSHELL

■ For the healthiest choice, look for a spread that's low in saturated and trans fats. We found plenty to choose from — see Healthy choices, below.

■ Olive oil spreads contain a lot less actual olive oil than you might think. There are plenty of cheaper spreads that are healthier.

■ Dairy blends (a mix of butter and vegetable oil) can be much easier to spread straight from the fridge than plain butter. But even the best of them have more saturated fat than most of the other spreads. (See Table 1, page 17.)

## HEALTHY CHOICES

## Basic spreads

|                                   |          |        |
|-----------------------------------|----------|--------|
| I CAN'T BELIEVE IT'S NOT BUTTER   | \$/100 g | \$0.58 |
| IGA Way of Life Lite Table Spread |          | \$0.31 |
| MEADOWLEA Lite                    |          | \$0.40 |

## Canola spreads

|                               |          |        |
|-------------------------------|----------|--------|
| WEIGHT WATCHERS Canola Spread | \$/100 g | \$0.55 |
| \$\$\$ HOME BRAND Canola Lite |          | \$0.19 |

## Olive oil spreads

|                |          |        |
|----------------|----------|--------|
| BERTOLLI Light | \$/100 g | \$0.58 |
|----------------|----------|--------|

## Polyunsaturated spreads

|                                               |          |        |
|-----------------------------------------------|----------|--------|
| MELROSE Omega 3 Care                          | \$/100 g | \$1.17 |
| BECEL Diet Polyunsaturated Reduced Fat Spread |          | \$0.58 |

## Cholesterol-lowering spreads

|                        |          |        |
|------------------------|----------|--------|
| FLORA Pro-active Light | \$/100 g | \$1.70 |
|------------------------|----------|--------|

The spreads marked \$\$\$ are particularly good value for money in their category while still being among the lowest in fat. See Table 2, page 18, for the full list of spreads.





### CAN I COOK WITH LOW-FAT SPREADS?

Probably not. Check the total fat content — if it's less than about 60% the spread's likely to be unsuitable for making cakes, scones or pastry. It's also likely to splatter too much if you try to fry with it.

For baking you can use one of the spreads that has more fat overall but is still low in saturated and trans fats (such as I CAN'T BELIEVE IT'S NOT BUTTER). And for frying, simply use a small quantity of vegetable oil.

### DANISH PASTRY

Denmark is the first country in the world to have banned the use of hydrogenated fat (hydrogenation is the process that creates trans fat — see right). Since the beginning of last year it's been illegal to sell products in which trans fat is more than 2% of the total fat.

So nearly half the Aussie spreads in Table 2 (page 18) would be banned in Denmark.

vitamins A, D, E and K, and fat-soluble antioxidants like beta-carotene. Fat also makes our food tastier and more palatable, adding to the enjoyment of eating.

It does, though, contribute more than twice the kilojoules as the same weight of protein or carbohydrate, so you've still got to watch how much you eat. To find out how much saturated and trans fat you eat, do our *Fat quiz* on [www.choiceextra.com.au](http://www.choiceextra.com.au).

### MORE ABOUT TRANS FATS

Trans fats are created by a process called hydrogenation, used to convert liquid oils into the solid fat needed to get the right consistency in a spread. Australian spreads now have a lot less trans fat than in the past, largely because advances in food technology have made it possible for manufacturers to produce spreads without depending so much on hydrogenation.

Trans fats are in fact mostly monounsaturated, but their molecules have a different shape from the naturally occurring monounsaturated fats that are abundant in canola, olive and peanut oil. Your body sees a molecule of trans fat as a saturated fat and treats it the same way.

### CHOOSING A SPREAD

We've ranked the spreads (Table 2, page 18) by their percentage of **saturated plus trans** fats — and to make them easier to compare, we've divided the spreads into the following categories:

■ **Basic spreads:** These are the spreads that make no special claims or don't fit into one of the other categories. They're usually made from a blend of vegetable oils.

■ **Canola spreads:** Canola oil is rich in monounsaturates and also has heart-healthy omega-3 fatty acids. They're about the same price as the basic spreads, averaging 30–35 cents per 100 g. And don't be put off by the rumours circulating on the internet that canola oil is toxic — there's no truth in them.

■ **Olive oil spreads:** Olive oil has acquired a certain mystique as a key ingredient of the heart-healthy 'Mediterranean diet', but in fact it's only one of a number of healthy oils. It's rich in monounsaturates, but so is canola. And although you pay a premium for most of these spreads (their average price is 67 cents per 100 g), you don't get as much olive oil in them as you might think. **OLIVE GROVE Classic Spread** ('with cholesterol free olive oil', according to the label) has the most with 23%, followed by the much cheaper **COLES FARMLAND Olive Spread** with 22%.

■ **Polyunsaturated spreads:** These contain sunflower, flaxseed or soybean oils that are rich in omega-3 and omega-6 fats. **MELROSE Omega 3 Care** has the least saturated and trans fats of all the spreads in this test (just 6%), but also has above average total fat and is quite expensive. Most other polyunsaturated spreads cost around 50 cents per 100 g.



Table 1: Dairy blends and butter (in order of lowest to highest saturated fat, then alphabetical)

|                                              | 1 Fat composition as % of the total spread |             |           | 2 Spreadability score (%) | kJ per 100 g | Low-salt | Price per 100 g |
|----------------------------------------------|--------------------------------------------|-------------|-----------|---------------------------|--------------|----------|-----------------|
|                                              | Saturated                                  | unsaturated | non-fat % |                           |              |          |                 |
| WESTERN STAR Spreadable Light                | 18                                         | 22          |           | 40                        | 1530         |          | 0.60            |
| DEVONDALE Light                              | 19                                         | 21          |           | 20                        | 1520         | ✓        | 0.60            |
| DEVONDALE Light with Calcium                 | 19                                         | 21          |           | 40                        | 1530         | ✓        | 0.64            |
| TRUE-BLUE Easy Spread Butter Blend           | 25                                         | 25          |           | 60                        | 1880         |          | 0.46            |
| WESTERN STAR SuperSoft                       | 25                                         | 33          |           | 100                       | 2180         |          | 0.60            |
| WESTERN STAR Whipped                         | 25                                         | 33          |           | 40                        | 2180         |          | 0.76            |
| DEVONDALE Extra Soft                         | 27                                         | 33          |           | 20                        | 2240         | ✓        | 0.54            |
| COUNTRY GOLD Butter Softened with Canola Oil | 30                                         | 40          |           | 20                        | 2630         |          | 0.40            |
| WESTERN STAR Premium Cultured Butter         | 30                                         | 40          |           | 80                        | 2640         | ✓        | 0.70            |
| WESTERN STAR Spreadable                      | 30                                         | 40          |           | 60                        | 2630         |          | 0.60            |
| WESTERN STAR Spreadable Salt Reduced         | 30                                         | 40          |           | 60                        | 2630         | ✓        | 0.60            |
| BI-LO Dairy Blend                            | 41                                         | 40          | 20        | 20                        | 3020         |          | 0.40            |
| COLES FARMLAND Dairy Blend                   | 41                                         | 40          | 20        | 20                        | 3020         |          | 0.40            |
| COLES FARMLAND Dairy Blend Salt Reduced      | 41                                         | 40          | 20        | 20                        | 3020         | ✓        | 0.40            |
| DEVONDALE Dairy Soft                         | 41                                         | 40          | 20        | 20                        | 3020         |          | 0.55            |
| DEVONDALE Dairy Soft Salt Reduced            | 41                                         | 40          | 20        | 20                        | 3030         | ✓        | 0.55            |
| HOME BRAND Dairy Blend                       | 41                                         | 40          | 20        | 20                        | 3020         |          | 0.39            |
| MAINLAND Butter Soft                         | 52                                         | 30          | 20        | 20                        | 3050         |          | 0.83            |
| MAINLAND Butter Soft Less Salt               | 52                                         | 30          | 20        | 20                        | 3070         | ✓        | 0.83            |
| ALLOWRIE Choicest Butter                     | 54                                         | 28          | 0         | 0                         | 3060         |          | 0.71            |
| WESTERN STAR Original Butter                 | 54                                         | 28          | 0         | 0                         | 3060         |          | 0.51            |
| COLES FARMLAND Butter                        | 56                                         | 25          | 0         | 0                         | 3020         |          | 0.45            |
| HOME BRAND Butter                            | 56                                         | 25          | 0         | 0                         | 3020         |          | 0.30            |

#### KEY

- Saturated fat
- Unsaturated fat
- Non-fat contents

#### 1 Fat composition

The bars show only the levels of saturated and unsaturated fats, as none of the labels gives the levels of mono and polyunsaturates separately.

#### 2 Spreadability score

One reason for buying dairy blends is that they're easier to spread than butter straight from the fridge. We measured how easy (or difficult) the different brands were to spread straight from the fridge, and calculated a score based on zero for butter and 100 for the most easily spreadable blend. The scores are rounded to the nearest 20.

See notes 2 and 3 to Table 2, page 19, for Low-salt and Price.

There are no strong health reasons for choosing one of these types over another. As far as your heart's concerned, the overriding consideration is to avoid saturated and trans fats.

But there's one more type of spread that claims to have a particular health function:

**Cholesterol-lowering spreads:** These claim to contain 'natural plant sterols' that lower cholesterol absorption — and the scientific evidence is quite strong that plant sterols work. They really can lower the level of harmful LDL cholesterol in your blood by more than 10%. But you'd need to eat at least 25 g of the spread each day to get that level of benefit — just smearing the occasional slice of toast with one of these spreads won't make much difference. **FLORA Pro-activ Light** gives you the most plant sterols for the least saturated and trans fats.

Unfortunately plant sterols also lower the absorption of beta-carotene, which forms vitamin A in the body. So if you eat these products a lot, it's a good idea to include an additional daily serve of yellow or orange vegetables and fruits.

And these products aren't a substitute for cholesterol-lowering medication. If in doubt, get medical advice.

## DAIRY BLENDS

If you really like the flavour of butter, dairy blends might seem a good compromise. They're made from butter blended with vegetable oils, or from butterfat processed to remove some of the saturated fat. They have less saturated fat than traditional butter, with the added bonus that they come out of the fridge easier to spread.

Unfortunately even those with the least saturated fat (**WESTERN STAR Spreadable Light**, **DEVONDALE Light** and **DEVONDALE Light with Calcium**) still have more of it than over three quarters of the spreads based on vegetable oil (see Table 1, above).

But our spreadability test confirmed they're definitely easier to spread than butter at fridge temperature (around 4°C), though there were some big differences between brands. **WESTERN STAR Supersoft** and **WESTERN STAR Premium Cultured Butter** rated highest for spreadability and were both very easy to spread on fresh white bread. Whether they still have enough of the mouthfeel of butter is something you'll have to check for yourself. While blends with the lowest spreadability score are still hard to spread on bread without ripping it apart, they're easier than butter and dead-easy to spread on hot toast.

## THE STARS

We chose the healthiest spreads in each category — they're marked with a ★ in Table 2 as well as listed in *Healthy choices*, page 15. They're spreads with the least saturated and trans fats, and at the same time often comparatively low levels of total fat. The spreads marked \$ are particularly good value while still being among the lowest in fat. Prices are given per 100 g for ease of comparison as the pack sizes vary.

Table 2: Spreads (in order of lowest to highest % of saturated and trans fat, then alphabetical)

### CANOLA

|                                                   |  |
|---------------------------------------------------|--|
| ★ <b>WEIGHT WATCHERS</b> Canola                   |  |
| <b>BI-LO</b> Canola Lite (A)                      |  |
| <b>GOLD'N</b> CANOLA Lite                         |  |
| <b>SS HOME BRAND</b> Canola Lite Margarine Spread |  |
| <b>NO FRILLS</b> Canola Lite Margarine Spread (A) |  |
| <b>TABLE LANDS</b> Canola (B)                     |  |
| <b>VITA-LITE</b> Canola (B)                       |  |
| <b>COLES</b> Canola Salt Reduced (A)              |  |
| <b>HARVEST AWARD</b> Lite Canola                  |  |
| <b>FLORA</b> Canola (A)                           |  |
| <b>NO FRILLS</b> Canola Margarine Spread (A)      |  |
| <b>BI-LO</b> Canola (A)                           |  |
| <b>BLACK &amp; GOLD</b> Salt Reduced Canola (B)   |  |
| <b>COLES FARMLAND</b> Canola (A)                  |  |
| <b>COLES SAVINGS</b> Canola (B)                   |  |
| <b>HOME BRAND</b> Canola Margarine Spread         |  |
| <b>GOLD'N</b> CANOLA                              |  |
| <b>MEADOWLEA</b> Canola                           |  |
| <b>IGA</b> Golden Fields Canola                   |  |
| <b>HARVEST AWARD</b> Canola                       |  |

### OLIVE OIL

|                                     |  |
|-------------------------------------|--|
| ★ <b>BERTOLLI</b> Light (A)         |  |
| <b>OLIVE GROVE</b> Lite (A)         |  |
| <b>BERTOLLI</b> Classico (A)        |  |
| <b>BERTOLLI</b> Extra Virgin (A)    |  |
| <b>COLES FARMLAND</b> Olive (A)     |  |
| <b>OLIVE GROVE</b> Classic (A)      |  |
| <b>OLIVE GROVE</b> Extra Virgin (A) |  |

### POLYUNSATURATED

|                                                        |  |
|--------------------------------------------------------|--|
| ★ <b>MELROSE</b> Omega 3 Care (A) (C)                  |  |
| ★ <b>BECEL</b> Diet Polyunsaturated Reduced Fat (A)    |  |
| <b>FLORA</b> Light (A)                                 |  |
| <b>BECEL</b> Salt Reduced (A)                          |  |
| <b>SEACHANGE</b> Omega-3 (A)                           |  |
| <b>FLORA</b> Original (A)                              |  |
| <b>FLORA</b> Salt Reduced (A)                          |  |
| <b>NUTTELEX</b> Polyunsaturated                        |  |
| <b>NUTTELEX</b> Polyunsaturated Table Margarine Kosher |  |

### CHOLESTEROL-LOWERING

|                                                         |  |
|---------------------------------------------------------|--|
| ★ <b>FLORA</b> Pro-active Light (A)                     |  |
| <b>FLORA</b> Pro-active (A)                             |  |
| <b>MEADOWLEA</b> Logical Omega 3 Lite                   |  |
| <b>SMART BALANCE</b> Reduce Your Cholesterol Absorption |  |
| <b>MEADOWLEA</b> Logical Omega 3                        |  |

| 1 Fat % of spread |       |      |      |         | kJ per 100 g | 2 Low-salt | 3 Price per 100 g |
|-------------------|-------|------|------|---------|--------------|------------|-------------------|
| Saturated         | trans | mono | poly | non-fat |              |            |                   |
| 0                 |       |      |      | 100     |              |            |                   |
| 13                | 24    | 12   |      |         | 1820         | ✓          | 0.55              |
| 10                | 5     | 29   | 16   |         | 2050         | ✓          | 0.26              |
| 14                |       | 26   | 13   |         | 2020         | ✓          | 0.58              |
| 14                |       | 25   | 11   |         | 2040         | ✓          | 0.19              |
| 11                | 4     | 30   | 15   |         | 2050         | ✓          | 0.40              |
| 11                | 4     |      | 35   | 11      | 2220         | ✓          | 0.25              |
| 11                | 4     |      | 34   | 10      | 2220         | ✓          | 0.30              |
| 11                | 5     |      | 32   | 17      | 2600         | ✓          | 0.20              |
| 12                | 4     |      | 24   | 15      | 2050         | ✓          | 0.31              |
| 17                |       |      | 35   | 18      | 2600         | ✓          | 0.51              |
| 12                | 5     |      | 33   | 16      | 2400         | ✓          | 0.19              |
| 12                | 6     |      | 34   | 18      | 2600         | ✓          | 0.26              |
| 11                | 7     |      | 37   | 10      | 2400         | ✓          | 0.27              |
| 12                | 6     |      | 34   | 18      | 2600         | ✓          | 0.20              |
| 11                | 7     |      | 37   | 11      | 2400         | ✓          | 0.19              |
| 13                | 5     |      | 26   | 13      | 2410         | ✓          | 0.20              |
| 18                |       |      | 34   | 17      | 2620         | ✓          | 0.54              |
| 18                |       |      | 34   | 17      | 2620         | ✓          | 0.40              |
| 15                | 6     |      | 30   | 19      | 2700         | ✓          | 0.28              |
| 16                | 6     |      | 18   | 18      | 2400         |            | 0.30              |
| 14                |       |      | 33   | 8       | 2040         | ✓          | 0.58              |
| 16                |       |      | 26   | 16      | 2170         | ✓          | 0.71              |
| 18                |       |      | 42   | 10      | 2600         | ✓          | 0.58              |
| 18                |       |      | 41   | 11      | 2600         | ✓          | 0.77              |
| 13                | 6     |      | 37   | 20      | 2700         | ✓          | 0.47              |
| 20                |       |      | 33   | 20      | 2800         | ✓          | 0.79              |
| 20                |       |      | 33   | 20      | 2800         | ✓          | 0.79              |
| 6                 |       |      | 39   | 26      | 2760         | ✓          | 1.17              |
| 9                 | 18    |      | 19   |         | 1770         | ✓          | 0.58              |
| 12                | 15    |      | 20   |         | 1760         | ✓          | 0.51              |
| 14                |       |      | 27   | 29      | 2610         | ✓          | 0.58              |
| 11                | 4     |      | 32   | 13      | 2200         | ✓          | 0.49              |
| 17                |       |      | 23   | 30      | 2600         |            | 0.51              |
| 17                |       |      | 23   | 30      | 2600         | ✓          | 0.51              |
| 14                | 7     |      | 23   | 30      | 2800         | ✓          | 0.52              |
| 15                | 7     |      | 25   | 32      | 3000         | ✓          | 0.54              |
| 8                 | 14    |      | 18   |         | 1500         | ✓          | 1.70              |
| 13                |       |      | 21   | 30      | 2390         | ✓          | 1.70              |
| 13                |       |      | 22   | 10      | 1800         | ✓          | 1.49              |
| 15                |       |      | 31   | 13      | 2180         | ✓          | 1.25              |
| 17                |       |      | 30   | 13      | 2500         | ✓          | 1.43              |

★ Best pick.

SS Good value and OK for fat.

(A) The fat composition figures are average values supplied by the manufacturer. They may differ slightly from those shown on the label. See note 1, far right.

(B) As we weren't able to get the full range of fat composition figures from the manufacturer we did our own lab tests. These figures are from tests on a single sample bought in Sydney in August 2004.

(C) This spread is made by a different process from other spreads in this table. It has a different texture and doesn't, for example, melt on hot toast. You're more likely to find it in healthfood shops than the big supermarkets.

(D) This product is to be called *Flora Buttery Taste* from January this year, but the fat content will be the same. You may also see *I Can't Believe It's Not Butter Light*, but it's to be discontinued in January.

Table 2: Spreads (in order of lowest to highest % of saturated and trans fat, continued)

#### BASIC

★ I CAN'T BELIEVE IT'S NOT BUTTER (A) (D)

\$\$ IGA Way of Life Lite

★ MEADOWLEA Lite

TABLE LANDS Cholesterol Free Monounsaturated (B)

TABLE LANDS Dairy Free (B)

ETA 5 STAR (A)

COLES SAVINGS Salt Reduced (A)

SMART BALANCE Kids

ULTIMA PLUS Dairy Free

COLES SAVINGS (B)

MIRACLE (A)

NO FRILLS Margarine Spread

NO FRILLS Salt Reduced Margarine Spread (A)

SUNBEAM (B)

BI-LO Salt Reduced (A)

BI-LO Table Spread (A)

COLES FARMLAND Salt Reduced (A)

COLES FARMLAND Table Spread (A)

COLES FARMLAND Soy Spread Salt Reduced (A)

COLES FARMLAND Soy (A)

COLES Sunspread (A)

MEADOWLEA Cholesterol Free with Canola Oil

MEADOWLEA Milk Free

BLACK & GOLD Monounsaturated

IGA Golden Fields Salt Reduced (B)

MEADOWLEA Salt Reduced

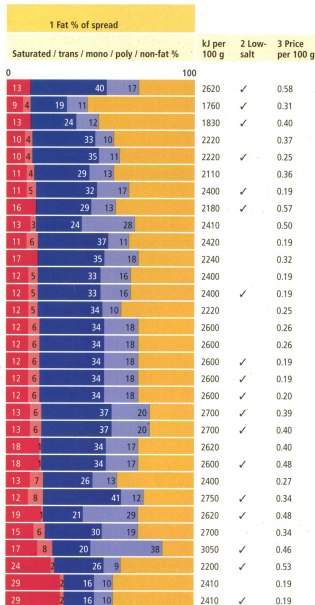
IGA Golden Fields Regular

NAYTURA Soya Margarine

MEADOWLEA Smooth

HOME BRAND Margarine Spread

HOME BRAND Salt Reduced Margarine Spread



#### KEY

- Saturated fat
- Trans fat
- Monounsaturated fat
- Polyunsaturated fat
- Non-fat contents

#### 1 Fat composition

This shows the breakdown of saturated, trans, monounsaturated and polyunsaturated fats (see the key, above) that together make up the total fat percentage of the product. Unless otherwise indicated, the figures were taken from the spread's nutrient composition panel. Often (footnote A), they're instead average values provided by the manufacturer. Seasonal variations can affect the levels of all fats to some degree.

On the subject of labels, while some manufacturers give average values for the different fats, others give minimum and maximum values that often don't add up to 100% — or even come close. These were the ones where we had to ask for the average values. It'd be a lot easier for shoppers to compare fat content if all manufacturers showed the averages.

#### 2 Low-salt

A tick indicates there's less than 400 mg of sodium per 100 g (this is half the sodium level of the saltiest spreads). Not all the spreads with sodium levels this low claim to be 'salt-reduced', but all those that do meet this condition.

#### 3 Price

For ease of comparison we've given prices per 100 g, based on prices we paid in August 2004.

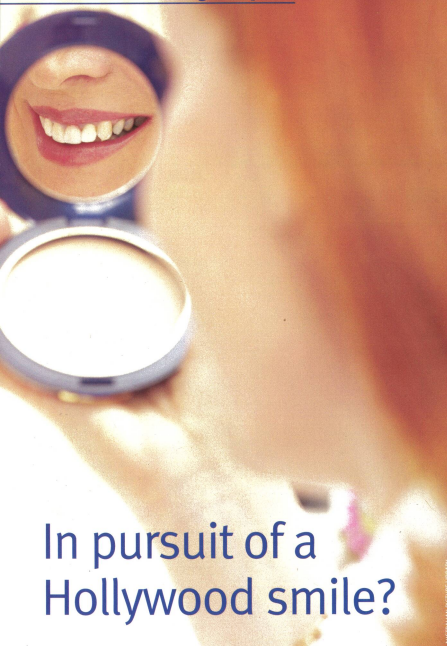
## Stop it or you'll go blind

You may have seen some alarming reports in the media that the vegetable oils in spreads are causing blindness (macular degeneration) and that the only safe fats to eat are butter or olive oil.

There's little evidence to support these claims. They're based on only a few small studies from the US. Moreover, scientific opinion is by no means unanimous, as one of the studies found no relationship between any type of fat intake and macular degeneration, and the most recent of them reported that macular degeneration was related to *total* fat intake, including animal fats. So the suggestion that butter's a preferable fat choice is inconsistent with the evidence as well as poor health advice for other reasons.



To get the full benefit from cholesterol-lowering spreads you need to eat about 25 g a day — that's a tablespoonful.



## In pursuit of a Hollywood smile?

If you're pinning your hopes on DIY whitening products for a Hollywood smile, you might be disappointed.

### IN A NUTSHELL

■ 55% of the people in our trial noticed a difference after using a whitening toothpaste for a month, but for most, the difference was small. Only **WHITE GLO Extra Strength Whitening Toothpaste Professional Choice** produced results that were significantly better than the average.

■ Before you buy any whitening product, we'd recommend talking to your dentist about the particular type of stain that affects your teeth, to avoid wasting money — and effort — on a product that may not work for you.



For just a few dollars (and some regular brushing), that dazzling white smile — once the domain of Hollywood film stars and anyone else who could afford expensive cosmetic dentistry — can be ours. Or so the packaging of 'whitening' toothpastes would have us believe. Using these products as directed will supposedly result in teeth that are "whiter and brighter", "sparkling white" and with "a whiteness you can see". **RAPID WHITE Whitening Toothpaste** with **SoftPolish** even claims to "whiten teeth shades lighter in only one week".

With high hopes and mirrors to hand a group of our Home Testers got down and dental with a selection of whitening toothpastes on the market. (See *The Toothpaste trial*, page 22, for details.)

### WHITE LIES?

Overall, 55% of trialists noticed a difference in the whiteness of their teeth after using a whitening toothpaste for one month. However, the goal of "a dazzling whiter smile" was not, in most cases, realised.

The majority of trialists who noticed a change in whiteness commented that their teeth were merely 'somewhat whiter', with only 10% describing the difference as 'a lot whiter', and a handful as 'exceptionally whiter'. And overall 45% of trialists perceived no difference at all in the whiteness of their teeth at the end of the trial.

The only product that produced results that were significantly better than the average was **WHITE GLO Extra Strength Whitening Toothpaste Professional Choice** — but 22% still said they'd noticed no whitening difference at all after use. (See the table, page 22, for all the results.)

It's also worth pointing out that at around \$23 for 100 g — three times the price of the next-dearest toothpaste — **REMBRANDT Low Abrasion Whitening Toothpaste** is a pretty pricy purchase that turned out to be no more effective than many cheaper products.

It's not all bad news, though — overall, trialists thought the whitening toothpastes still cleaned their teeth reasonably well, with the same **WHITE GLO** toothpaste coming out top for this too.

### THE CAUSES OF STAINED TEETH

The natural colour of people's teeth varies from white to yellow, with every shade in between. All teeth contain red and grey colours, and the grey colours increase with age.

Teeth are made up of three layers: tough outer enamel, softer dentine, and the inner pulp. As you get older, the enamel thins through wear and tear, and the darker dentine layer can begin to show through. The dentine structure also changes as it



takes up more minerals from the pulp. These two processes can make older teeth appear yellow.

In addition to genes and aging, tooth colour depends on many factors, of which general health (when your teeth are forming) and diet and lifestyle (once teeth are in your mouth) are key.

■ **Health:** Your health — particularly in early years when teeth are still developing — can be responsible for intrinsic stains, which affect the colour of the tooth itself. Certain antibiotic drugs, such as tetracycline, can affect tooth colour during development, as can severe fevers.

Damage to the forming tooth can also cause internal discolouration, as can damage to the pulp of a permanent tooth (as a result of receiving a blow during contact sport, for example).

■ **Diet and lifestyle:** Then there are the surface stains, caused by diet and lifestyle — tea, coffee and smoking are three of the biggest culprits.

## STAIN REMOVAL

Many whitening products specifically refer to surface stain removal as one of their methods of whitening action. A professional clean at the dentist can also remove surface stains (including those between the teeth), often producing a fresher, whiter appearance.

But while removing surface stains can restore teeth to their natural colour, this doesn't necessarily mean your teeth will be intrinsically whitened. Deeper stains are more difficult to remove and may not respond well to home bleaching treatments, or even to the special bleaches and whitening treatments used by dentists. If the tooth is very badly stained, some type of veneer might be needed to disguise the area.

So before you spend money on DIY whitening, it's probably worth speaking to your dentist first about treatment options for the particular type of stain affecting your teeth.

## Other ways to whiten

You might expect more from a product marketed specifically as a teeth whitener than from a mere whitening toothpaste — after all, you tend to pay more for them, they usually require more effort, and some you use in addition to toothpaste, rather than instead of.

Most dedicated whitening products also make quite strong claims about their effects, which can raise expectations: "whitens teeth by up to 5 shades in just 14 days", "whitens up to 10 shades" and "continuous application for 7–10 days will achieve amazing results", for example. Some even go so far as to guarantee a whitening effect.

To try and assess if they're all they've cracked up to be, eight CHOICE staff members in pursuit of a white smile volunteered to try out eight different products on the market. Each trialist followed the instructions and time frame specific to the single product they were using. On the right is a list of the whitening products on trial, and a rundown of the type of system they use.

Because each product was tested by only one trialist, we can't draw conclusions about specific brands, but results averaged across the brands suggest there was a small increase in whiteness — if only by

one or two shades. But by two weeks after the trial, some trialists' teeth had already lost some of the whiteness they'd achieved.

And the feedback about satisfaction with the result, and whether the trialist would buy the product, was varied.

## MOUTH TRAY WITH GEL

**NATURAL WHITE 5-Minute Tooth Whitening System**

**NATURAL WHITE Rapid White Tooth Whitening System**

**WHITE GLO Tooth Enamel Whitening System**

**NATURAL WHITE 5-Minute Tooth Whitening System Non-Peroxide Formula**

All these kits, except **NATURAL WHITE's** 'non-peroxide formula', use a peroxide bleach. You place a mouth tray with whitening gel over your teeth and leave it in your mouth for a set period of time. Some kits include 'whitening accelerator' to coat your teeth with beforehand, and require you to use the whitening toothpaste or mouthwash provided afterwards.



PHOTOS: GLOFF AMBLER

## BLEACHING STRIPS

**MACLEANS Brilliant White Dental Whitening Strips**

You mould whitening strips to your teeth and leave them on for 30 minutes.

## BLEACH APPLICATOR

**COLGATE Simply White Advanced Clear Whitening Gel**

**MACLEANS Brilliant White Whitening Treatment Gel**

You apply whitening gel to your teeth with an applicator, and leave it on for a set time period.

## BLEACH AND ENZYME PASTE

**REMBRANDT Dazzling White**

This is whitening toothpaste and bleaching gel rolled into one product. You brush teeth as you normally would.



## The toothpaste trial

For one month, 753 CHOICE Home Testers put their normal toothpaste aside and used an allocated whitening toothpaste twice a day instead. Twenty different toothpastes were included in our trial — all claiming to be ‘whitening toothpaste’ — and each product was tested by 32 to 41 trialists.

Thanks to everyone who took part.

\* Based on what we paid in July 2004.

(A) Toothbrush included with the pack we bought.

### 1 Whitening difference noticed.

This is the percentage of trialists who noticed a change in the whiteness of their teeth after using the whitening toothpaste for one month. It groups together trialists who responded that their teeth were ‘somewhat whiter’, ‘a lot whiter’ and ‘exceptionally whiter’ after the trial; the majority were only ‘somewhat whiter’.

| Brand / product (in rank order)                                               | 1 Whitening difference noticed (%) | Price per 100 g (\$)* |
|-------------------------------------------------------------------------------|------------------------------------|-----------------------|
| <b>WHITE GLO</b> Extra Strength Whitening Toothpaste Professional Choice      | 78                                 | 2.87 (A)              |
| <b>COLGATE</b> Whitening Plus Tartar Control                                  | 66                                 | 3.59                  |
| <b>NATURAL WHITE</b> Advanced Whitening Brushing Gel with SoftPolish plus PVP | 63                                 | 7.02                  |
| <b>MACLEANS</b> Advanced Whitening                                            | 62                                 | 3.56                  |
| <b>NATURAL WHITE</b> Advanced Whitening Toothpaste with SoftPolish plus PVP   | 61                                 | 7.02                  |
| <b>WHITE GLO</b> Extra Strength Whitening Toothpaste Anti-Stain Anti-Plaque   | 59                                 | 2.66 (A)              |
| <b>COLGATE</b> Whitening Plus Tartar Control 2 in 1 Toothpaste & Mouthwash    | 58                                 | 3.68                  |
| <b>PEARL DROPS</b> Extra Whitening                                            | 58                                 | 3.95                  |
| <b>RAPID WHITE</b> Whitening Toothpaste with SoftPolish                       | 55                                 | 7.80                  |
| <b>COLGATE</b> Whitening with Micro-Cleansing Crystals                        | 54                                 | 4.09                  |
| <b>REMBRANDT</b> Low Abrasion Whitening Toothpaste                            | 53                                 | 23.47                 |
| <b>DENTITEX</b> Advanced Whitening Toothpaste (Aldi)                          | 51                                 | 1.42                  |
| <b>MACLEANS</b> Ice Advanced Whitening                                        | 51                                 | 4.06                  |
| <b>PEARL DROPS</b> Arctic Mint Whitening Gel with Mouthwash                   | 51                                 | 4.29                  |
| <b>CEDEL</b> Whitening Plus Tartar Control                                    | 49                                 | 2.82                  |
| <b>COLGATE</b> Icy Blast Whitening 2 in 1 Toothpaste & Mouthwash              | 49                                 | 3.99                  |
| <b>NATURAL WHITE</b> Advanced Whitening Toothpaste Natural Formula            | 47                                 | 6.31                  |
| <b>COLGATE</b> Total Plus Whitening                                           | 43                                 | 3.33                  |
| <b>COLES</b> Persona Peppermint Whitening Toothpaste                          | 42                                 | 1.42                  |
| <b>COLGATE</b> Fresh Confidence Plus Whitening                                | 41                                 | 3.53                  |

## How the ingredients work

Here's our guide to the whitening ingredients in the products on trial, and how it's claimed they work.

■ **Peroxides** (such as urea peroxide, carbamide peroxide) break down to hydrogen peroxide, which chemically bleaches both surface stains and the tooth itself. Peroxides, at a high enough concentration, can whiten teeth so that they're lighter than your natural colour.

Most of the non-toothpaste whitening products we looked at contain some form of peroxide (see *Other ways to whiten*, page 21), but it's not an ingredient of any of the toothpastes in our Home Tester trial.

■ **Abrasive agents** (such as alumina, silica/hydrated silica, dicalcium phosphate) remove surface stains by physically rubbing them off the surface of the teeth.

■ **Detergents** (such as sodium lauryl sulphate) act as foaming agents and help to clean the tooth surface.

■ **Enzymes** (such as papain, derived from papaya) slow down the build-up of ‘pellicle’ — the protein-containing layer of saliva that forms on your teeth within a minute of brushing. Surface stains stick to the pellicle layer.

■ **Polyvinylpyrrolidone (PVP)** is another ingredient, found in some **MACLEANS** and

**NATURAL WHITE** products. According to **NATURAL WHITE**, PVP ‘binds tightly to tannins and other types of potential tooth-staining compounds’, theoretically preventing stains from accumulating on the tooth surface. Interestingly, it was also the main ingredient in the first really successful hairsprays in the 1950s!

■ **Triclosan** is an antibacterial agent that can help reduce plaque levels and fight tooth decay. It's also an anti-inflammatory agent, so can reduce the progress of gum diseases.

■ **Others** (such as tetrasodium pyrophosphate, pentasodium triphosphate, citric acid, sodium tripolyphosphate [Triclene®]) chemically alter the electrical charge on the stains so that they're less able to stick to your teeth.

One product's mysteriously labelled ‘advanced whitening ingredient’ (or similar) may in fact just be the same as one found in other whitening brands. Compare the ingredients lists on the packaging to find out.

### ARE TEETH WHITENERS SAFE?

Bleaches and abrasives, the two whitening ingredients most commonly found in whitening

products, are generally thought to be safe, but it's useful to be aware of the following:

■ **Bleaches:** Home bleaching is generally thought to be safe, but dental experts advise consulting your dentist before using them. Using home bleaching products well beyond the recommended level may result in damage to the protein component of tooth enamel, making the teeth appear more opaque (cloudy), so it's important always to follow the product instructions carefully.

Some people can also experience temporary tooth or gum sensitivity when using home bleaching products, and some products are designed specifically to reduce this transient problem.

■ **Abrasives:** The levels of abrasives in toothpastes are generally low, so you shouldn't need to worry about them wearing down the surfaces of your teeth. However, as a general rule, you shouldn't over-clean your teeth or use excessive force when you brush. Twice a day for at least two minutes is what the Australian Dental Association recommends.

Very abrasive toothpastes, such as those designed for removing tar from cigarette smoking, may not be suitable for children or people with sensitive teeth or receding gums.

# LUNCHBOX LESSONS

You want healthy, your kids want cool for school — we guide you through the peaks and pitfalls of kids' lunchboxes.

Eating healthy food helps children concentrate and learn, so a healthy lunchbox at school is vital. To help get it right, we've answered the question *What makes a healthy lunch?* (see below).

Snacks are important too, and with the masses of convenient lunchbox snacks on the market — and the associated pestering from your kids to have the latest fad: a cheese 'dipper' or a fruit 'strap', perhaps — it's easy to lose track of what's good and what's not. So we've taken a look at a range of prepacked lunchbox snacks now available on the supermarket shelves, and compared them nutritionally to help you choose the healthiest options (see the table, page 26).

## WHAT MAKES A HEALTHY LUNCH?

The best lunch is one that's nutritious and quick to prepare, but also fun and easy to eat. Encouraging your children to be involved in choosing foods and preparing their lunch can help ensure that it not only gets eaten, but enjoyed as well. You can build a healthy lunch by drawing on all the major food groups.

■ **Starchy food:** A carbohydrate-based food is a good starting point for a lunch to fill hungry tummies. This can be bread, pasta, rice, potatoes (not chips!) or couscous, for example. Given that sandwiches are often the lunchbox staple, keep kids interested by using a variety of breads, including wholemeal, white, rye, rolls, pita, bagels, focaccia and rice cakes.

■ **Protein food:** Lean meat, tinned tuna, egg, tofu and baked beans are good high-protein foods for filling sandwiches, or for adding to food like pasta or rice salad. Importantly, most provide iron as well. Nuts and peanut butter are also good protein sources, but check that your school doesn't have a 'nut-free' safety policy before packing them.

Protein-rich dairy foods like yoghurt and cheese are also good sources of calcium, which is vital for growing bodies, especially for strong bones.

■ **Fruit and veg:** For plenty of vitamins, minerals and dietary fibre, try to include at least a serve each of fruit and veg in every lunchbox.

Kids might find vegetables more interesting served as sticks with dip, mixed together with pasta, or as topping for a mini pizza.

Pack fruit and veg that are manageable and easy to eat: fruit salad, mandarins or pre-peeled oranges, seedless grapes, cherry tomatoes or snow peas, for example. If you don't mind paying a bit extra, look out for **THE WIGGLES Applesnax** and **KIDEDIBLE** packaged fruit in the fresh fruit and veg section of your supermarket, which have been specially selected for their child-friendly size.

■ **Drinks:** Don't forget a drink. Active bodies need plenty of fluid to keep them well hydrated, and water is the best choice, although milk — both cow's and soy with added calcium — is good too. Drinks can linger in kids' mouths, so sugary ones may increase the risk of tooth decay; 100% fruit juice

## IN A NUTSHELL

■ **It's important for children to eat healthily, and variety and balance are key. Build a tasty, nutritious lunch by including starchy food, protein food, some dairy food, fruit and veg and a drink. See What makes a healthy lunch?, left, for details.**

■ **Snacks help kids keep going through the day, and there are plenty of convenient prepacked snacks to choose from that kids will enjoy. But only a quarter of the snacks we reviewed met all our nutrition criteria, so watch which ones you put in your kid's lunchbox.**



PHOTO: TAMARA GRAYHAM



Three teaspoons of sugar is around 15 g — the amount of sugar (including fruit sugar) in most of the fruit bars in our table.

### PLAYING FAVOURITES?

You may have noticed the **FAVOURITE FOODS Tucker Time** range on supermarket shelves. Called a 'combination lunch pack', they contain variations of processed meat, cheese, crackers and a chocolate or sweet. They may be convenient, but nutritionally we think they leave a lot to be desired.

There's no fruit or veg, for a start, although the packaging does suggest adding some fresh fruit. A lot of the energy comes from fat, which isn't ideal. They also contain lots of salt. And with no good source of fibre, they're unlikely to fill kids up. A good lunchbox alternative? Far from our favourite. (Tucker Time will be rebranded to **Munchables** soon, with minor changes to some products.)



can be diluted. Drinks with added sugar that don't provide the same nutritional goodies as fruit juice — sweetened juice drinks, cordial and fizzy drinks, for example — are best left out altogether.

### SNACK ATTACK

Snacks are just as important as main meals to keep children going — the key is to provide ones that are nutritious as well as tasty and appealing. While the taste side of it can be left up to the kids, the nutrition factor is harder to judge.

Ideally, snacks shouldn't be too high in kilojoules (energy), and should be low in saturated fat, added sugar and salt. It's also good to vary them so you have a balance of nutrients. For example, try not to include sugary snacks very often. Likewise if you're packing a sandwich with a salty filling like **VEGEMITE**, avoid tipping the scales by adding a salty snack to the lunchbox as well.

A lot of the foods suggested for lunches are suitable for snacks too, but if you don't have time to prepare something, there are plenty of snacks that you can buy from the supermarket, already in convenient lunchbox-sized portions. Some are reasonably nutritious, while others leave a lot to be desired.

We looked at around 100 snacks to see how they measured up, and found 25 that met all our nutrition criteria. Here's how we decided which snacks are suitable to eat more often, and those that are best kept as treats.

■ **Energy:** Kids need energy from food to last through the day, and ideally a snack will provide enough energy to keep them going and be nutritious as well. However, too much energy combined with not enough exercise can lead to excessive weight gain. For this reason, we looked for lunchbox snacks

with less than 600 kilojoules per serve. This is about the equivalent of a banana, although a banana will fill your kids up a lot more than some of the smaller snack products — not to mention give them extra fibre, vitamins and minerals.

Some snacks, particularly biscuits and chips, only meet our energy criteria because they're small servings, so don't be tempted to put more than one in.

■ **Saturated fat:** Too much saturated fat in the diet is associated with an increase in coronary heart disease, and even kids need to limit the amount they eat. Fatty snacks are also energy-dense and so can contribute to weight gain.

With snacks, watch out for biscuits — some, like **BISC & BISCUITS Milky Way** and **PARADISE Kidz Choc Pinkies**, contain more saturated fat than chips. And a lot of muesli and cereal bars are stuck together with fats and sugars, so pick carefully.

Many of the cheese snacks have too much saturated fat to meet our lunchbox snack criteria. But some are OK (see the table) and they can also provide valuable nutrients like calcium and protein. For a good source of calcium, check the labels for ones with at least 100 mg calcium per 100 g.

■ **Sugar:** Foods high in added sugar often have minimal nutritional value, so don't make very good everyday lunchbox snacks. And if they stick to kids' teeth they can encourage decay, so are best avoided. Lollies are the worst, but fruit straps can be

### Food safety

Food-poisoning bugs can grow quickly in foods like cooked meats, fish, chicken and salads, particularly in warm weather. And because lunchboxes may sit around for several hours before the food is eaten, there's plenty of opportunity for this to happen. Follow these suggestions to help keep food safe.

■ **Hygiene.** Make sure your hands, chopping board and utensils are clean and dry before preparing food.

■ **Keep the food cold.** Use an insulated lunchbox and/or put a freezer pack in with the food to keep it cool. Alternatively, include a frozen drink bottle in the lunchbox — it should defrost by lunchtime.

■ **Preparation.** Save time and keep food cool by freezing sandwiches the night before (or even prepare and freeze sandwiches for a week in advance). Foods suitable for freezing include bread, cooked meat, cheese, peanut butter, baked beans, mashed eggs and **VEGEMITE**. Yoghurt and fruit like grapes and banana segments can be frozen too.

particularly sticky, and fruit bars in general were the most sugary snacks we looked at. The majority were around 65–75% sugar — that's about three teaspoons (15 g) of sugar in each little 20 g bar. While fruit sugars contribute to this total, most are only around 25% fruit, so added sugar makes up the bulk.

■ **Sodium:** Too much sodium (generally from salt) is associated with raised blood pressure, which increases the risk of heart disease and stroke. So it's important not to have too much, whatever your age.

Snack combinations of biscuits with dip or spread are often very salty. **ARNOTT'S Shapes Big Dippers Tasty Cheddar**, for example, contains close to a quarter of the maximum recommended daily intake of sodium for 8–15-year-olds in a single 55 g serve. Chips can be high in sodium too, so check the labels before you buy.

■ **Fibre:** We didn't include fibre in our ratings, even though it's an important nutrient for children. This is partly because manufacturers aren't required to provide this information on nutrition information panels, so many products don't give this detail. But it's also because it's something other lunchbox items such as fruit, vegies and wholegrain bread provide if you include them.

## COST OF CONVENIENCE

Lunchbox snacks are usually available in multi-packs and are relatively cheap — you can get most snacks for under \$1 a serving. Even so, in most cases you'll be paying extra for the convenience of individually wrapped portions, rather than for a novel product or any additional nutrition benefits.

Take fruit, for example. A multipack of snack-size **GOULBURN VALLEY Fruit Paradise Two Fruits** costs \$5.57, or 93 cents for a 140 g tub. In comparison, an 825 g can of **Two Fruits** costs \$2.84, only 48 cents for a 140 g portion. Or instead of a 25 g pack of **ARNOTT'S Cheese & Bacon Shapes**, you could buy a 200 g box and send the same portion off to school in a reusable container for three quarters of the price.

These savings can add up over time, so as long as you can convince your child not to hanker for the funky packaging, it can be worth forgoing the convenience.

## MORE INFO

For more lunchbox tips, go to the following websites:

- NSW Health — [www.health.nsw.gov.au/pubs/2004/pdf/easylunch.pdf](http://www.health.nsw.gov.au/pubs/2004/pdf/easylunch.pdf)
- [www.goforyourlife.vic.gov.au](http://www.goforyourlife.vic.gov.au) (type "lunchbox" in the search box).

## A working example

To get a better idea of the nutrition impact of different snacks on a kid's daily diet, we took a look at the lunchboxes of two active 10-year-olds, Jackson and Daniel. On an average day, they look like this:

|                   | Jackson         | Daniel        | Max. recommended for whole day (age 10) |
|-------------------|-----------------|---------------|-----------------------------------------|
| Food in lunchbox  | Juice drink     | Water         |                                         |
|                   | Cheese sandwich | Egg sandwich  |                                         |
|                   | Apple           | Banana        |                                         |
|                   | Chips           | Popcorn       |                                         |
|                   | Cheese dipper   | Fruit yoghurt |                                         |
|                   | Fruit bar       | Muesli bar    |                                         |
| Energy (kJ)       | 3242            | 2523          | 9000                                    |
| Saturated fat (g) | 16              | 8             | 25                                      |
| Sugar (g)         | 64              | 39            | 110                                     |
| Sodium (mg)       | 1002            | 539           | 2300                                    |

On the surface they both look healthy enough, but Jackson's lunchbox could be improved by making just a few small changes:

- The sweetened juice drink and fruit bar combined mean that Jackson's lunchbox has almost double the sugar of Daniel's, which isn't great for his teeth. Changing the drink to water and only providing a fruit bar occasionally would make a difference.
- The cheese sandwich, chips and cheese dipper in Jackson's lunchbox together contribute a lot of sodium, and double the saturated fat, of Daniel's lunchbox. Switching the dipper for yoghurt, for example, would keep the calcium but cut back on the salt and sat fat. Swapping the chips for popcorn would also help.
- Both boys could benefit from having their sandwich fillings varied, perhaps including salads and lean meats or dips like hummus, as an alternative source of protein.





1 & 2 Brand / product and serving size (g)

## MUESLI / CEREAL BARS AND BITES

|                                                                            | Energy | Sat. fat | Sugar | Sodium |
|----------------------------------------------------------------------------|--------|----------|-------|--------|
| <b>MOTHER EARTH</b> Fruit Topped Muesli Bars Apricot (30)                  | ⊕      | ✓        | ✓     | ✓      |
| <b>UNCLE TOBYS</b> Bites Muesli Shotz Red Fruits (30)                      | ⊕      | ✓        | ✓     | ✓      |
| <b>UNCLE TOBYS</b> Chewy Muesli Bars Apricot (31.25)                       | ⊕      | ✓        | ✓     | ✓      |
| <b>BLUEBIRD</b> In-cred-i-bites Choc Hazelnut (25)                         | ✓      | ✓        | ✓     | ✓      |
| <b>HOME BRAND</b> Rice Bar Treats (22)                                     | ✓      | ✓        | ✓     | ✓      |
| <b>KELLOGG'S LCMs</b> Corn Flakes Honey (22)                               | ✓      | ✓        | ✓     | ✓      |
| <b>KELLOGG'S</b> Muesli Bars Choc Chip (31.25)                             | ✓      | ✓        | ✓     | ✓      |
| <b>DAYDAWN</b> Apricot & Yoghurt Muesli Bars (31.25)                       | ✓      | ✓        | ✓     | ✓      |
| <b>GO NATURAL</b> Fruit Delight Snack Pack (28)                            | ✓      | ✓        | ✓     | ✓      |
| <b>KELLOGG'S LCMs</b> Cereal & Milk Bars Coco Pops (22), Rice Bubbles (20) | ✓      | ✓        | ✓     | ✓      |
| <b>KELLOGG'S</b> Muesli Bars Choc Malt (31.25)                             | ✓      | ✓        | ✓     | ✓      |
| <b>SANITARIUM</b> Fruity Bix Bars Strawberry (25)                          | ✓      | ✓        | ✓     | ✓      |
| <b>UNCLE TOBYS</b> Yoghurt Toppings Muesli Bars Apricot (31.25)            | ✓      | ✓        | ✓     | ✓      |
| <b>WHITE WINGS</b> Space Food Sticks Chocolate (16.7)                      | ✓      | ✓        | ✓     | ✓      |

## CAKE / MUFFIN BARS

|                                                             |   |   |   |   |
|-------------------------------------------------------------|---|---|---|---|
| <b>TOP TASTE</b> Disney Yummy Tummy Muffin Treats (27)      | ✓ | ✓ | ✓ | ✓ |
| <b>BALFOURS</b> Kids Treats Double Choc Mini Cake Bars (55) | ✓ | ✓ | ✓ | ✓ |
| <b>KELLOGG'S</b> K-time Muffin Bar Apple (45)               | ✓ | ✓ | ✓ | ✓ |
| <b>MILLS &amp; WARE'S</b> Muffin Bars Apple & Cinnamon (42) | ✓ | ✓ | ✓ | ✓ |
| <b>TWINKLES</b> Choc Lamington Fingers (21)                 | ✓ | ✓ | ✓ | ✓ |

## BISCUITS

|                                                      |   |   |   |   |
|------------------------------------------------------|---|---|---|---|
| <b>ARNOTT'S</b> Shapes Cheese & Bacon, Pizza (25)    | ✓ | ✓ | ✓ | ✓ |
| <b>ARNOTT'S</b> Shapes Barbecue, Cheddar (25)        | ✓ | ✓ | ✓ | ✓ |
| <b>ARNOTT'S</b> Tiny Teddy Choc Chip, Chocolate (25) | ✓ | ✓ | ✓ | ✓ |

**BISC & BISCUITS** (various toppings) (24.3–26.8)

|                                                                |   |   |   |   |
|----------------------------------------------------------------|---|---|---|---|
| <b>PARADISE</b> Kidz Aussie Animals, Choc Pinkies, Uglies (25) | ✓ | ✓ | ✓ | ✓ |
| <b>AUNT BETTY'S</b> Wheelies (30)                              | ✓ | ✓ | ✓ | ✓ |

## CHIPS / POPCORN

|                                                       |   |   |   |   |
|-------------------------------------------------------|---|---|---|---|
| <b>COOLPAK</b> Popped Corn (20)                       | ⊕ | ✓ | ✓ | ✓ |
| <b>HEALTHIERIES</b> Kids Care Rice Wheels Cheese (18) | ⊕ | ✓ | ✓ | ✓ |
| <b>NU-VIT</b> Honey Corn & Rice Crackers (15)         | ⊕ | ✓ | ✓ | ✓ |
| <b>REAL MCCOY</b> Air Popped Corn (13)                | ⊕ | ✓ | ✓ | ✓ |
| <b>NU-VIT</b> Honey Corn (15)                         | ✓ | ✓ | ✓ | ✓ |
| <b>REAL MCCOY</b> Burger Man, Sweet Corn Corny's (15) | ✓ | ✓ | ✓ | ✓ |
| <b>SMITH'S</b> Crisps Original, Doritos (20)          | ✓ | ✓ | ✓ | ✓ |
| <b>SMITH'S</b> Twisties (20)                          | ✓ | ✓ | ✓ | ✓ |

## 3 NUTRITION

Energy Sat. fat Sugar Sodium

1 & 2 Brand / product and serving size (g)

## DIPS / SPREADS WITH CRACKERS

|                                                                  |   |   |   |   |
|------------------------------------------------------------------|---|---|---|---|
| <b>BLUEBIRD</b> Dunkaroos Choc Hazelnut (22.5)                   | ✓ | ✓ | ✓ | ✓ |
| <b>HOME BRAND</b> Cheddar Cheese Dip & Crispbread (25)           | ✓ | ✓ | ✓ | ✓ |
| <b>KRAFT</b> Snackabouts Cream Cheese with Chicken Biscuits (28) | ✓ | ✓ | ✓ | ✓ |
| <b>KRAFT</b> Vegemite Snackabouts (26)                           | ✓ | ✓ | ✓ | ✓ |
| <b>ARNOTT'S</b> Salada Dippers, Jatz Dippers Tasty Cheddar (26)  | ✓ | ✓ | ✓ | ✓ |
| <b>ARNOTT'S</b> Tiny Teddy Dippers Strawberry (27)               | ✓ | ✓ | ✓ | ✓ |
| <b>BI-LO</b> Snack Packs Cheese (25)                             | ✓ | ✓ | ✓ | ✓ |
| <b>FARMLAND</b> Snack Pack Cheddar Cheese (25)                   | ✓ | ✓ | ✓ | ✓ |
| <b>FERRERO</b> Nutella Hazelnut Spread (20)                      | ✓ | ✓ | ✓ | ✓ |
| <b>KRAFT</b> Peanut Butter Snackabouts (26)                      | ✓ | ✓ | ✓ | ✓ |
| <b>KRAFT</b> Snackabouts Cheddar (26)                            | ✓ | ✓ | ✓ | ✓ |
| <b>NEW DAY</b> Dippits Cheddar (25) (Aldi)                       | ✓ | ✓ | ✓ | ✓ |
| <b>UNCLE TOBYS</b> Le Snak Original (25)                         | ✓ | ✓ | ✓ | ✓ |
| <b>ARNOTT'S</b> Shapes Big Dippers Tasty Cheddar (55)            | ✓ | ✓ | ✓ | ✓ |

## DAIRY DESSERTS / CUSTARDS

|                                                            |   |   |   |   |   |
|------------------------------------------------------------|---|---|---|---|---|
| <b>COLES FARMLAND</b> Chocolate Dairy Snak (100)           | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>DAIRY FARMERS</b> Choc Custard (100)                    | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>HUNT'S</b> Snack Pack Scooby-Doo! Cookies & Scream (99) | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>HUNT'S</b> Snack Pack Squeeze 'n Go Chocolate (64)      | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>NESTLE</b> Chocolate Dairy Dessert (100)                | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>FOSTER CLARK'S</b> Snak Pack Chocolate (140)            | ✓ | ✓ | ✓ | ✓ | ✓ |
| <b>CHOCOLATE STAMPEDE</b> Dairy Snak (100) (Aldi)          | ✓ | ✓ | ✓ | ✓ | ✓ |
| <b>NESTLE</b> Milo Energy Dairy Snak (150)                 | ✓ | ✓ | ✓ | ✓ | ✓ |
| <b>PAULS</b> Choc Shock Chocolate Dairy Snak (100)         | ✓ | ✓ | ✓ | ✓ | ✓ |
| <b>YOGO</b> Twins Chocolate (150)                          | ✓ | ✓ | ✓ | ✓ | ✓ |

## YOGHURT

|                                                                   |   |   |   |   |   |
|-------------------------------------------------------------------|---|---|---|---|---|
| <b>DAIRY FARMERS</b> Yogurt Strawberry (100)                      | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>NESTLE</b> Real Fruit Yogurt Strawberry (100)                  | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>NESTLE</b> Xpogo Yogurt Sundae Strawberry (115)                | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>PAULS</b> The Wiggles Yoghurt with Real Fruit Strawberry (100) | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>YOPLAIT</b> Go-Gurt Yogurt Tubes Strawberry (70)               | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>SKI</b> The Incredible Gulp Slippery Strawberry (200)          | ✓ | ✓ | ✓ | ✓ | ✓ |
| <b>YOPLAIT</b> Petit Miam Strawberry (100)                        | ✓ | ✓ | ✓ | ✓ | ✓ |

## FRUIT

|                                                                   |   |   |   |   |   |
|-------------------------------------------------------------------|---|---|---|---|---|
| <b>COLES FARMLAND</b> Diced Two Fruits in Natural Juice (140)     | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>GOLDEN CIRCLE</b> Fruit Bites Fruit Salad in Light Syrup (140) | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>GOULBURN VALLEY</b> Two Fruits, Peach, Apple (140)             | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>SPC</b> Fruit Salad in Juice (120)                             | ⊕ | ✓ | ✓ | ✓ | ✓ |
| <b>SWEET VALLEY</b> Two Fruits in Syrup (120) (Aldi)              | ⊕ | ✓ | ✓ | ✓ | ✓ |

### 3 NUTRITION

Energy Sat. fat Sugar Sodium

1 & 2 Brand / product and serving size (g)

#### FRUIT BARS, STRAPS, JELLIES, ETC

|                                                                  |   |   |   |   |   |
|------------------------------------------------------------------|---|---|---|---|---|
| <b>GOLDEN CIRCLE</b> Splurtz Apple & Strawberry Fruit Puree (65) | ☺ | ✓ | ✓ | ✓ | ✓ |
| <b>JELLY JOY</b> Jelly with Real Peach Slices (200)              | ☺ | ✓ | ✓ | ✓ | ✓ |
| <b>SPC</b> Fruit Snacks Two Fruits in Strawberry Jelly (120)     | ☺ | ✓ | ✓ | ✓ | ✓ |
| <b>BELLIS</b> Strawberry School Bars (20)                        |   | ✓ | ✓ | ✓ | ✓ |
| <b>BI-LO</b> Fruit Bars Strawberry (20)                          |   | ✓ | ✓ | ✓ | ✓ |
| <b>COLES FARMLAND</b> Strawberry Fruit Bars (20)                 |   | ✓ | ✓ | ✓ | ✓ |
| <b>GOLDEN DAYS</b> Apricot Bites (40)                            |   | ✓ | ✓ | ✓ | ✓ |
| <b>HOME BRAND</b> Fruit Bars (20)                                |   | ✓ | ✓ | ✓ | ✓ |
| <b>IXL</b> Fruit Bars Strawberry (20) (A)                        |   | ✓ | ✓ | ✓ | ✓ |
| <b>NEW DAY</b> Fruit Bars (20) (Aldi)                            |   | ✓ | ✓ | ✓ | ✓ |
| <b>UNCLE TOBYS</b> Real Fruit Bars Strawberry (20)               |   | ✓ | ✓ | ✓ | ✓ |
| <b>GREENS</b> Looney Tunes Fruit Snacks (25)                     |   | ✓ | ✓ | ✓ | ✓ |
| <b>HEALTHIERIES</b> Kids Care Real Fruit Waves Raspberry (14)    |   | ✓ | ✓ | ✓ | ✓ |
| <b>IXL</b> Fruit Snacks Nougats & Crosses Raspberry (15) (B)     |   | ✓ | ✓ | ✓ | ✓ |
| <b>SUNRIPE</b> School Straps Strawberry (15)                     |   | ✓ | ✓ | ✓ | ✓ |
| <b>UNCLE TOBYS</b> Fruit Roll Ups Rainbow Berry Fruits (15.6)    |   | ✓ | ✓ | ✓ | ✓ |
| <b>ZING</b> Fruit Drops (24.2)                                   |   | ✓ | ✓ | ✓ | ✓ |
| <b>NU-VIT</b> Fruit & Yoghurt Snacks (40)                        |   | ✓ | ✓ | ✓ | ✓ |

Products with a ☺ meet all four of our nutrition criteria and are the best picks for a lunchbox snack.

(A) The recipe and packaging are currently under review.

#### 1 Brand / product

The products are listed within groups in order of the number of nutrition criteria they meet, then alphabetically (see note 3, right, for the criteria).

The products were bought in Sydney supermarkets in July/August 2004. Where they come in a variety of flavours, we state the flavour/variety reviewed.

#### 2 Serving size

All the products we bought come in individually packaged, lunchbox-sized servings. We treated each individually packaged product as one serving, even in the occasional case where the label said a serving was only a portion of the pack (such as half a small bottle of drinking yoghurt) or slightly over one

pack (a box and a bit of sultanas). We think most parents would behave this way too. The majority of the products are available in multi-packs.

#### 3 Nutrition

We compared products per serving and per 100 g to assess whether they met our four criteria:

- Energy: 600 kJ or less per serving.
- Saturated fat: 5 g or less per 100 g.
- Sugar: less than 15 g per 100 g. If some of the sugar comes from real fruit or lactose, less than 25 g per 100 g.
- Sodium: 200 mg or less per serving.

A tick means a product is OK for that particular nutrient; a blank means it contains too much of it to be recommended.



The snacks that meet our nutrition criteria — see the table, left.

# Safe for your baby?

Of 10 cots on test, only half passed Australian standard safety tests.

## IN A NUTSHELL

- On test: 10 cots costing between \$400 and \$500.
- Only five out of 10 cots passed all the mandatory safety requirements of the Australian standard, but that's an improvement on many of our previous tests.
- What to look for on page 31 can help you check for yourself whether a cot is OK.

**A**re children's cots as safe as they can be yet? Last time we reported on them only one out of nine passed the standard's safety tests (CHOICE, Jan/Feb 2002), so this time the fact that five out of 10 passed could be seen as a good result.

In fact, though, no cot available for purchase should fail — legally, all cots (even secondhand ones) must comply with the safety clauses of the Australian standard, and a cot that fails any of them shouldn't be on sale. There's no excuse for manufacturers whose work fails to meet the standard. Yet accidents in and from cots are still one of the most common causes of injury and death in young children in the home.

## PASSES AND FAILURES

The most common cot-related injuries to children occur when kids climb or fall out of cots, so there should be no footholds, and other features such as dropsides should be childproof. Entrapment injuries can also happen when a child's head, limbs or fingers get caught between bars or panels.

We tested the cots to the 1995 Australian/New Zealand standard. (There's a 2003 standard, but its safety clauses haven't yet been made mandatory, so cot manufacturers can still work to the older standard.) The tests include checking the cots' construction, design, general safety, durability and stability, and informative labelling and markings.

Five cots — the **CHILDCARE Stirling**, **CHILDCARE Windsor**, **MALI Brumby**, **KINGPARROT Juta** and **LOVE N CARE Premium** — passed the mandatory safety tests in the standard and so can all be recommended.

However, the latter two failed our additional 'snag' test, which checks whether a cot has any potential snag points that might be a strangulation

risk. It's also known as the 'ball and chain' test, as it checks whether a loop of chain with a weighted ball on the end can be slung over and held by any point on the cot. It's a useful test as it can mimic the risk of a child's clothing getting caught on a point or knob. It's part of the standard for testing portable cots but it's not currently included for standard cots.

While the **LOVE N CARE** and **KINGPARROT** failed this test, we think the practical risk of strangulation is very unlikely, so have included them in our *What to buy* list.

The other five cots tested all failed the mandatory standard on one or more safety count, and three also failed to provide adequate or complete instructions for maintenance. The safety problems were mainly finger and limb entrapment hazards, and while they're not life-threatening, they could be potentially painful and distressing for your baby. The two **BABYSAFEs** also have a dropside locking design that might let your older baby or another child open it. Given that there are better choices available, we don't recommend any of these five cots.

We also noted some poor quality control on two of the cots. The first **BABYSAFE** Federation we bought had a faulty dropside locking device and we had to buy



## WHAT TO BUY

These are the cots that passed all the mandatory Australian standard's safety tests — see the table, page 30, for more information about them. Prices are what we paid in August/September 2004 or recommended/average retail, as provided by manufacturers in October 2004.



**CHILDCARE STIRLING**

Price: \$399



**CHILDCARE WINDSOR**

Price: \$469



**MALI BRUMBY**

Price: \$439

another. And the **GRO-YEARS C10** had a finger entrapment hazard between the bottom rail of the dropsidde and the mattress support as a result of incorrectly positioned screw holes at one end of the cot. While these might be one-off faults, they reflect badly on the manufacturers' quality control and suggest these problems could happen to any one of their cots.

## CHOICE VERDICT

Buying a child's cot shouldn't be a lottery — every cot on sale should pass the mandatory Australian safety standard.

We're pleased five models in this test met the safety standards and hope it's a sign that cots are finally getting safer. But the manufacturers whose cots failed — disappointingly all based in Australia — must lift their game.

CHOICE has called on the ACCC, which has responsibility for enforcing the mandatory standard, to act to remove from sale any cot that's failed any of the Australian standard safety tests. We'd like to see the ACCC do more to ensure non-complying cots don't get into shops in the first place.



**KINGPARROT JUTA**

Price: \$480



**LOVE N CARE PREMIUM**

Price: \$400

*The KINGPARROT (above) and the LOVE N CARE (above right) passed all the standard's safety tests but failed our snag test (see Passes and failures, far left.)*

\* All the cots tested have two mattress positions; you can only use the higher one (easier on your back) when your baby is too young to sit up.

\*\* Prices are what we paid in August/September 2004, or recommended/average retail, as provided by manufacturers in October 2004.

ns Not stated.

(A) Note that although both these cots are called Childcare, they're made by different companies.

(B) After receiving CHOICE's test results, the manufacturer said it would take, or was already taking, steps to rectify problems we found.

(C) The manufacturer says a modified model is now on sale, with a pushbutton dropside. This may have fixed a couple of hazards we found relating to the dropside mechanism, but perhaps not other breaches of the safety standards that we found.

Brand / model

## RECOMMENDED

CHILDCARE Stirling 091120-003 (A)

CHILDCARE Windsor (A)

MALI Brumby ISMF006

KINGPARROT Juta

LOVE N CARE Premium

## FAILED SOME STANDARD SAFETY TESTS (in alphabetical order)

BABYSAFE Federation (B)

BABYSAFE Pilbara (B)

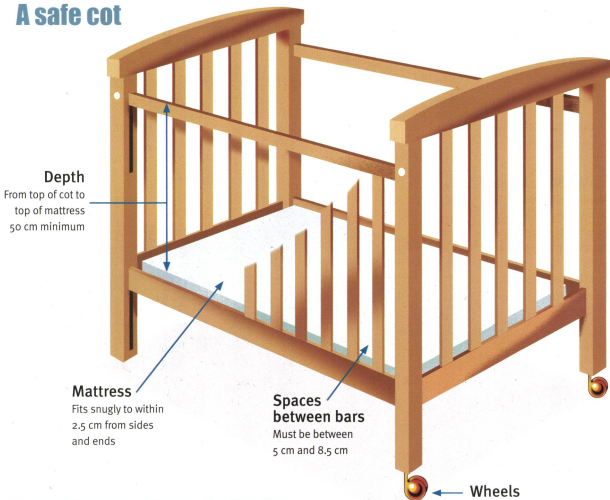
GRO-YEARS C10 (C)

REGENT Sherbrooke

SUNBURY C02 (B)

| SAFETY                    | FEATURES*                                   | SPECIFICATIONS                                                               |
|---------------------------|---------------------------------------------|------------------------------------------------------------------------------|
| 1 Passed CHOICE snag test | Dropside 'Teething' strips Castors / brakes | Recommended mattress size (W x L x D, cm) External dimension (W x L x H, cm) |
| ✓                         | 1 4 / 4                                     | 69 x 130 x 15 78 x 142                                                       |
| ✓                         | 1 Fixed side and dropside 4 / 4             | 69 x 130.5 x 15 76 x 143                                                     |
| ✓                         | 1 2 / 2                                     | 69 x 129.5 x 15 77 x 136                                                     |
|                           | 1 4 / 4                                     | 68 x 131 x 12 77 x 144                                                       |
|                           | 1 4 / 4                                     | 69 x 130 x 10 79 x 144                                                       |
|                           |                                             |                                                                              |
|                           | 1 4 / 4                                     | 69 x 130 x 12.5 76 x 141                                                     |
| ✓                         | 1 4 / 4                                     | 69 x 130 x 12.5 76 x 135                                                     |
|                           | 1 4 / 4                                     | 69 x 130 x 15 76 x 140                                                       |
|                           | 1 2 / 0                                     | 65.5 x 129 x 15 74 x 138                                                     |
| ✓                         | 2 Both dropside 4 / 4                       | 69 x 130 x 13 76 x 142                                                       |

## A safe cot



**Protrusions**  
from cot no more than 0.8 cm (8 mm)

**Finger traps**  
No spaces between 0.5 cm and 1.2 cm

**Arm/leg traps**  
No spaces between 3 cm and 5 cm

**Head traps**  
No spaces 9.5 cm or wider

## WHEN IS IT TIME FOR A REAL BED?

When a child shows signs of being able to climb out of the cot, it's time to move them to a bed or a mattress on the floor.



| Country of origin | Origin                    | Manufacturer / distributor           | Price (\$)** |
|-------------------|---------------------------|--------------------------------------|--------------|
| China             | China                     | Childcare Nursery Products (A)       | 399          |
|                   | NZ                        | Childcare Products (NZ) / Babyco (A) | 469          |
|                   | Australia                 | Mali Furniture                       | 439          |
|                   | China                     | Boori international                  | 480          |
|                   | China                     | Love N Care                          | 400          |
|                   | Australia                 | Babysafe Australia                   | 499          |
|                   | Australia                 | Babysafe Australia                   | 500          |
|                   | Australia                 | Gro-Years Nursery Furniture          | 400          |
|                   | Australia                 | Regent Nursery Furniture / Babyco    | 449          |
| Australia         | Sunbury Nursery Furniture | 459                                  |              |

### 1 Passed CHOICE snag test

See *Passes and failures*, page 28, for a description of this test, which isn't included in the standard's mandatory safety tests. However, Standards Australia is re-evaluating it as a test for household cots. We're confident all the cots in this report that failed this test pose only a very unlikely strangulation risk.

## OLDER COTS

Even secondhand cots shouldn't be on sale if they don't meet the safety standards, but what about hand-me-downs? It's generally recommended you don't use an old or 'heirloom' cot, as they can be a hazard to children.

Among other things:

- The gaps between bars can be too wide.
- Some have points or knobs on corners that can create a strangulation hazard.
- Their dropside catches can be too easy to undo.
- They can be painted with lead paint that children can swallow when they're teething.

## What to look for

Since 1998 it's been illegal to sell cots (including secondhand cots) that don't comply with the Australian standard's safety requirements. Unfortunately our previous tests have shown you can't rely on labelling that says a cot meets the standard — we've found cots labelled as meeting it that don't, and some that made no claims that passed. So you need to check a cot carefully yourself when buying.

Things to keep in mind when shopping for a cot include:

- Does the cot seem stable enough to withstand an older child pulling on the end or side without tipping over?
- Is the frame sturdy, with no cracks, splinters, dents or corrosion, and no joints or other parts a child could pull apart?
- Is the base strong?
- Is the depth from the top of the mattress to the top of the cot at least 50 cm, to prevent a child falling out?
- Is the space between bars between 5 cm and 8.5 cm (so that if a child can get an arm or leg through the gap, they can also get it back out again), and are the bars rigid?
- Are there any gaps or openings between 0.5 cm and 1.2 cm that could trap a child's finger?
- Does the mattress fit snugly, with no more than a 2.5 cm gap between it and the cot's sides and ends (so a child can't slip between it and the cot's end or base and suffocate)?
- Are the surfaces smooth, with gently rounded edges and corners?



The gap between this mattress and the side of the cot is too big — it should be less than 2.5 cm so a child can't slip down and risk suffocating.

- Is the cot free of footholds that would allow a child to climb onto or out of it?
- Are the dropside catches childproof — able to be closed securely and not easily opened by a child — while still being easy enough for the carer to operate? Does the dropside move up and down smoothly and quietly?
- Are there any points or knobs, including decorative features, screws, nuts or bolts, that a child could hit their head on or that their clothing could snag on, risking strangulation?
- Are there any decorative transfers that a child could peel off and choke on?
- Does it have two or four wheels or castors to help you move it around? If there are four, do at least two have brakes?
- Are there clear, complete and easy-to-follow instructions for assembly and maintenance, with contact details of the cot's supplier?



If a cot has four castors or wheels, at least two should have brakes.

## STORING IT

We take stock of disposable food storage options.

## IN A NUTSHELL

- Disposable food storage containers, bags and covers are good value for money, although how long they'll last depends on what you do with them. Using them for microwaving fatty or sugary foods can cause significant wear and tear.
- All the products we looked at did well in our freshness test, so are ideal for storing both dry and moist foods. For practical reasons, the rigid containers are the most suitable for storing wet foods.

Sandwiches and salads left over from the barbecue; the sandwich you've made for tomorrow's lunch; a packet of chips you opened for the movie, but couldn't quite finish; and that last slice of lasagne from dinner. It seems a shame to throw it out, but if your food's going to see another day, you need to store it in something that'll keep it fresh. And with food storage products, it's usually helpful if they can handle some freezing, defrosting and reheating to boot.

But if you don't want to fork out for a deluxe matching set of durable food storage containers like that old faithful, TUPPERWARE, there are other semi-durable plastic storage options to be found on the

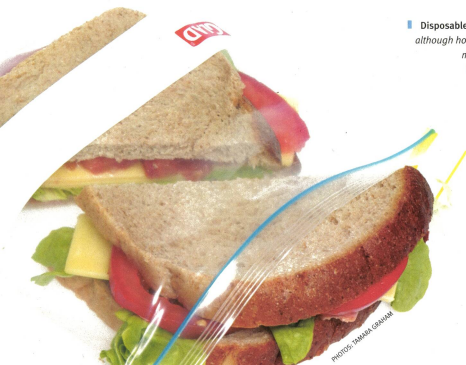


PHOTO: TAMARA GRAHAM

TABLE 1. BAGS

| Brand / model (in rank order)                | PERFORMANCE         |                        |                       |                     | FEATURES               |                     | SPECIFICATIONS           |             | COSTS               |                   |
|----------------------------------------------|---------------------|------------------------|-----------------------|---------------------|------------------------|---------------------|--------------------------|-------------|---------------------|-------------------|
|                                              | 1 Overall score (%) | 2 Durability score (%) | 3 Freshness score (%) | 4 Leakage score (%) | Claimed microwave-safe | Fridge/freezer-safe | Size tested (W x H, cm)* | No. in pack | Price per item (\$) | Pack price (\$)** |
| <b>MULTIX</b> Quick Zip Resealable           | 96                  | 97                     | 93                    | 100                 | ns                     | ns                  | 18 x 17                  | 30          | 0.07                | 1.99              |
| <b>COLES RELIANCE</b> Snap Seal Resealable   | 95                  | 95                     | 92                    | 100                 | ✓                      | ✓                   | 18 x 17                  | 50          | 0.04                | 1.99              |
| <b>GLAD</b> Snap Lock Resealable             | 94                  | 95                     | 90                    | 100                 | ✓                      | ✓                   | 18 x 17                  | 30          | 0.08                | 2.29              |
| <b>HERCULES</b> Click Zip Resealable (A)     | 94                  | 94                     | 92                    | 99                  | ns                     | ns                  | 18 x 16.5                | 40          | 0.05                | 1.99              |
| <b>HERCULES</b> Ezy Slide Resealable (B) (C) | 94                  | 94                     | 91                    | 99                  | ns                     | ns                  | 18 x 22 (D)              | 10          | 0.19                | 1.99              |
| <b>GOLIATH</b> Fresh Seal Resealable (Aldi)  | 91                  | 91                     | 88                    | 100                 | ✓                      | ✓                   | 18 x 17                  | 50          | 0.04                | 1.99              |
| <b>GLAD</b> Zip Slide Redosable (B)          | 88                  | 93                     | 85                    | 81                  | ✓                      | ✓                   | 21 x 17                  | 12          | 0.21                | 2.48              |

## Bags

Bags are handy for storing any number of dry or moist foods such as chips, nuts, herbs and spices, salad leaves and sandwiches. Those tested all did an excellent job of keeping Cheezels fresh — better than **GLAD Wrap**, in fact. And they all got good results for strength and overall durability, so you could get a lot of mileage out of them if you use them several times. However, they're more awkward to clean than a rigid container, so you may only want to use them once.

Although they all scored well in our leakage test, for practical purposes bags are less suited to storing wet foods, as they're harder to handle: if you leave them

open they can easily flop over and spill their contents.

We wouldn't recommend reheating or even defrosting food in these bags in a microwave — at least not sugary foods or fatty ones like bolognese sauce, which can reach very high temperatures. Even when we used the relatively mild defrost setting in our durability test (see note 2, page 34), all the bags melted and burst near the seams — even though they were left slightly open to allow steam to escape.

If you use bags to store and freeze food, it's probably best to defrost it at room temperature or, better still hygiene-wise, in the fridge.

\* Sandwich-bag size.

\*\* Prices are recommended retail, as provided by manufacturers in September 2004.

ns Not stated.

(A) Hercules Click Zip Storage bags are also available, which are thicker and more suitable for freezing.

(B) Zip to close. The rest are press-seal.

(C) Discontinued but you may still find them in shops.

(D) Pack contains different sizes.

See page 34 for notes 1–4.

supermarket shelves. They're certainly cheaper, but are they any good?

We put three types to the test: rigid plastic lunch or takeaway-style containers with press-on lids, zip and press-seal plastic bags, and elasticised covers that are intended to go over things like bowls or open cans, particularly when cling wrap won't stick.

## REUSABLE TOO?

We didn't directly compare these products to more expensive food-storage products intended for long-term use. Ultimately, the ones we looked at are disposable: how long they last will depend on what you use them for.

If you're using them to store food, carry a packed lunch — or even for reheating foods like rice or vegies in the case of the rigid containers — you might get repeat uses out of them for an extended period of time, so from a cost point of view they're value for money. But if you want to heat up foods with a high fat or sugar content, which can reach very high temperatures, more durable options are probably a better buy.

## PUTTING THEM TO THE TEST

The three types we tested can have different uses, so the test methods for each varied slightly (see notes 1–4, page 34, for details). Each type comes in a range of sizes, but for this report we tested products all of a similar size within each type.

Based on the results, we'd recommend all the products tested, bar the **HERCULES EzyCovers** — unless you think you'll never use them in the microwave (see Covers, right).

## SCRUB UP

**MULTIX WARE** and **GLAD** say their rigid containers are dishwasher-safe. This may be true, but because they're lightweight, they tend to turn over during the cycle and end up filled with dirty water. Washing them by hand is much more practical.

## Fantastic plastic?

Plastics are made from long, linked chains of single molecules called monomers. Some of the monomers used in plastic are toxic, but when joined together in a chain to create the plastic they become inert and therefore safe. However, some monomers in plastic may remain unattached, and there's concern that they can leach into food, particularly fatty foods.

All the products in our test are made from food-grade polypropylene or polyethylene plastics. Although monomers from these plastics can migrate into food, particularly after repeated microwaving, there's no known risk from eating them.

But if you don't like the thought of swallowing plastic monomers, you might prefer using microwave-safe glass containers for heating fatty foods, and absorbent kitchen paper or a plate as an alternative to prevent spatter.

## Covers

If your bowl of pudding and custard needs a quick zap in the microwave but you don't want to get in a tangle with cling wrap, or when your food's in a wooden or plastic container that's just not cling wrap friendly, covers (otherwise known as 'shower caps') offer an alternative solution.

All the covers got good results in our freshness test. And they're handy for covering foods in the fridge in order to prevent other foods dripping or dropping on them, or as a quick and easy reusable cover for opened tins of pet food, for example. But our tests found them to have limitations.

They're not very practical for use with wet foods, because if the food is sloshed around, they'll leak. And while the covers can stop food spattering onto the inside of a microwave, they can also be difficult to handle, as they tend to sag down into the hot food and melt. As with any covering on microwaved food, you need to be careful not to be scalded by steam when you're removing these covers from containers.

In fact none of the covers made it through our durability test unscathed. The **GLAD Handi-covers** and the **HOME LIVING Protectit** were both badly damaged after going through the full set of durability cycles. And the **HERCULES EzyCovers** melted on the first microwave heating cycle to the point where they were no longer usable.

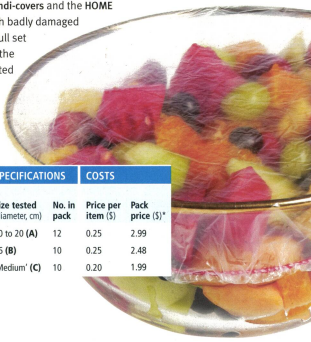


TABLE 2. COVERS

| Performance     |                        |                       | Features               |                       | Specifications             | Costs       |                     |                  |
|-----------------|------------------------|-----------------------|------------------------|-----------------------|----------------------------|-------------|---------------------|------------------|
| 1 Overall score | 2 Durability score (%) | 3 Freshness score (%) | Claimed microwave-safe | Fridge / freezer-safe | Size tested (diameter, cm) | No. in pack | Price per item (\$) | Pack price (\$)* |
| 81              | 71                     | 99                    | ns                     | ns                    | 10 to 20 (A)               | 12          | 0.25                | 2.99             |
| 80              | 69                     | 99                    | ✓                      | ns                    | 36 (B)                     | 10          | 0.25                | 2.48             |
| 73              | 59                     | 99                    | ✓                      | ✓                     | 'Medium' (C)               | 10          | 0.20                | 1.99             |

\* Prices are recommended retail, as provided by manufacturers in September 2004.

ns Not stated.

(A) The covers in a pack are all one size, for use on containers with a diameter of 10–20 cm.

(B) 'Medium' size according to the packaging.  
(C) Pack contains different sizes — three large, three medium, four small.

See page 34 for notes 1–3.



## DISPOSE OF THEM WISELY

There's a plastics coding system, which helps recycling contractors sort materials and know what types of plastic they're dealing with. The rigid containers we tested are made from polypropylene, which is recycling code 5. The bags and covers are all made from polyethylene, recycling code 4.

As both of these plastics are recyclable, when they give up the ghost and you want to dispose of them, you won't necessarily be harming the environment.

But you'll need to contact your council to find out which plastics you can recycle through its kerbside recycling scheme, as not all councils collect all codes of plastic. If you put the wrong plastics in your recycling bin they'll still be separated during the sorting process but then sent to landfill, so it only increases the cost to the council.

## Rigid containers

For wet foods like soups and sauces, these containers are a good bet. Even after 10 cycles of freezing, defrosting, reheating and washing they were all fully functional and didn't leak — although they were all damaged to varying degrees.

But if you freeze foods in containers, be careful they don't fall out when you open the freezer door. All the ones we looked at cracked in our drop test (see note 2, below, for details).

In the freshness test, the **MULTIX WARE All Purpose Containers** were best, although the other brands were still very good. They were all better than **GLAD Wrap** at keeping Cheezels fresh. The **EZY STORE** containers have an edge in terms of value for money, though they're a bit smaller than the others.

TABLE 3. RIGID CONTAINERS

| TABLE 3. RIGID CONTAINERS          |  | PERFORMANCE         |                        |                       |                     | FEATURES               |                       | SPECIFICATIONS   |             | COSTS               |                  |
|------------------------------------|--|---------------------|------------------------|-----------------------|---------------------|------------------------|-----------------------|------------------|-------------|---------------------|------------------|
| Brand / model (in rank order)      |  | 1 Overall score (%) | 2 Durability score (%) | 3 Freshness score (%) | 4 Leakage score (%) | Claimed microwave-safe | Fridge / freezer-safe | Size tested (mL) | No. in pack | Price per item (\$) | Pack price (\$)* |
| EZY STORE                          |  | 79                  | 68                     | 85                    | 100                 | ✓                      | ns                    | 500              | 8           | 0.37                | 2.99             |
| MULTIX WARE All Purpose Containers |  | 77                  | 60                     | 91                    | 100                 | ✓                      | ✓                     | 750              | 2           | 1.35                | 2.69             |
| GLAD GladWare                      |  | 76                  | 60                     | 88                    | 100                 | ✓                      | ✓                     | 709              | 3           | 0.95                | 2.84             |

\* Prices are recommended retail, as provided by manufacturers in September 2004.

ns Not stated.

### 1 Overall score

The overall score is made up as follows:

#### Rigid containers and bags

- Durability score (50%)
- Freshness score (35%)
- Leakage score (15%)

#### Covers

- Durability score (65%)
- Freshness score (35%)

### 2 Durability score

Durability for each product was tested:

- **Rigid containers** were filled with bolognese sauce, then put in the freezer overnight, defrosted and reheated in a microwave, emptied and rinsed, then washed in a dishwasher.

Throughout 10 cycles of this treatment, the containers and lids were inspected for cracks, warping, pitting (caused by hot food) and shrinkage, and their physical condition rated.

The containers were also half-filled with bolognese sauce and frozen, then dropped from 1.38 m. If the container cracked it failed the drop test — this happened for all the containers tested.

■ **Bags** were filled with sauce and frozen as above, but then defrosted at room temperature and their physical condition rated. This cycle was repeated 10 times.

They were also tested for tensile strength, which measures the force at which a material tears or splits.

■ **Covers** were put over glass bowls half-filled with bolognese sauce, then refrigerated, microwave-heated, hand-washed and their physical condition rated. This cycle was repeated 10 times, or until the cover was no longer usable. They were also tested for tensile strength.

Durability scores are made up as follows:

#### Rigid containers and bags

- Physical condition after use (70%)
- Drop test/tensile strength (30%)

#### Covers

- Physical condition after use (50%)
- Tensile strength (50%)

### 3 Freshness score

To test how fresh they kept food, we put Cheezels — snacks that are very sensitive to air exposure — into the containers and bags, and into bowls with the covers as 'lids'.

After a week, we measured the force required to crush the Cheezels. This test was done for all the products when new, and in the case of rigid containers and bags, also after going through the durability test (see left). We didn't test the covers after the durability test as they obviously didn't fit well enough any more to keep anything fresh, and we didn't think anyone would try it in reality.

The results were compared to the crush force of Cheezels fresh from their bag (these have a low crush force — freshness score 100%), those kept in a bowl under **GLAD Wrap** for a week (freshness score 84%), and those left exposed to the open air (these have a high crush force — freshness score 0%).

The freshness score for covers has only one component — before the

durability test. Freshness scores for rigid containers and bags are made up as follows:

- Before durability test (75%)
- After durability test (25%)

### 4 Leakage score

To test how well they seal against liquid leakage (in case you want to use them to take your lunch to work, for example), containers and bags were half-filled with bolognese sauce and put on their sides on paper towels. After one hour, the paper was inspected for leakage.

This test was done on the rigid containers and bags when new, and after going through the durability test. It wasn't performed on the covers as they're clearly not meant to be used for such a purpose.

Leakage scores are made up as follows:

- Before durability test (75%)
- After durability test (25%)



Dishwashers are becoming more energy and water-efficient, but are they sacrificing performance for eco-cred?

**W**ith many states now experiencing water (and power) shortages, eco-friendly upgrades are becoming more important when you're looking to buy or replace a dishwasher. The big question is, does a more efficient machine come at the expense of performance?

There are exceptions, but our tests show that machines that dry the dishes well tend to be less energy-efficient, indicating that good drying performance mostly comes at the price of higher energy use.

Of all the tested machines, only a few managed to score 80% or better for water or energy efficiency when tested on the 'normal' cycle (our research shows the majority of CHOICE subscribers still run their dishwashers on this program). The machines that scored well were:

■ **BLANCO BFDW6W** and **KLEENMAID DW20** with 83% for water efficiency.

- **HAIER HDW101** with 89% for water efficiency.
- **WHIRLPOOL 6ADP5540WH** with 85% for energy efficiency.
- **ASKO D3350** with 86% for energy and 90% for water efficiency—the only dishwasher to rate well for both. Unfortunately the downside of the water and energy-sparing with this machine was comparatively low washing and drying scores.

Most dishwashers, however, do wash well, so one way you can save water is by not rinsing plates before stacking them. We test each dishwasher's washing performance by getting it to clean a load of dishes, cups or glasses and cutlery coated with food that's been left to dry on overnight. As most machines now wash these clean on the normal program, there's no need to waste water by rinsing plates before you stack—just scrape the food scraps off first. Or, if you do pre-rinse (because you don't run the machine every day, say) try using the dishwasher on its 'fast' program, which uses less water.

## IN A NUTSHELL

- We tested eight new dishwashers, three of which are recommended in our What to buy list (page 37).
- Very good drying performance usually comes at the price of lower energy efficiency.
- Most dishwashers wash well even if food's dried onto the plates—you can save water by not rinsing before loading them.



## Profiles

Newly tested models in the *What to buy* list (far right) are profiled. For profiles of other models in the list, see CHOICE, July 2004, April 2004 and Jan/Feb 2004, or go to [www.choiceextra.com.au](http://www.choiceextra.com.au) and click on the appropriate date under 'dishwashers'.

### BLANCO BFDW6W

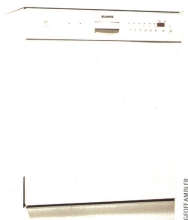
Price: \$1330

#### GOOD POINTS

- Excellent drying performance.
- Very good water efficiency.
- Delayed start feature.
- Wash time display.
- Quick-wash option.
- Extra cutlery basket.

#### BAD POINTS

- Baskets have limited adjustments (bowls only fit without large plates, for example).
- Height adjustment of the top basket is fiddly.
- The filter is tricky to access.
- Relatively long cycle time.



GEOFF AMBLER

### KLEENMAID DW20

Price: \$1699

#### GOOD POINTS

- Very good water efficiency.
- Quick-wash option.
- Delayed start feature.
- Extra cutlery basket.

#### BAD POINTS

- Baskets have limited adjustments (bowls only fit without large plates, for example).
- Height adjustment for the top basket is fiddly.
- The filter is tricky to access.



### HAIER HDW101

Price: \$649

**BEST BUY**

#### GOOD POINTS

- Exceptionally good value for purchase price plus 10-year running costs.
- Very good water efficiency.
- Program progress indication.
- Half-load option.

#### BAD POINTS

- Some limitations to basket design.
- The filter is tricky to access.
- Relatively long cycle time.

## Eco-award winners

The DISHLEX DX403 and the ASKO in this test are already winners, both being 'TESAWs' — Top Energy Saver Award Winners. This is an award system created by governments to recognise the most energy-efficient products on the market. You can spot a TESAW by the title in the green band on the bottom of the energy label on the appliance when you buy it (see below).

So why didn't they do so well in our tests? Partly it's that we test machines on their 'normal' cycles, while for dishwashers, a TESA can be based on their eco program. But it's also because we take more than energy into account in our scoring. In the case of the ASKO, for example, it did score well for energy efficiency even on its 'normal' program, but was let down by comparatively low scores for washing and drying.

To take a look at other TESAWs go to [www.energyrating.gov.au/tesaw-main.html](http://www.energyrating.gov.au/tesaw-main.html).



## For people with a disability

An occupational therapist from the Independent Living Centre, NSW, assessed the dishwashers' suitability for people with a disability.

■ If you're in a wheelchair, none of the new models is particularly suitable. A single seven-setting **FISHER & PAYKEL Dishdrawer** positioned at a suitable height is your best option.

■ If you have problems with your hands, wrists or arms, look for easy pushbutton controls, a door that's easy to open and close, and baskets and dispensers that slide in and out readily. In this latest test the **BLANCO** and **KLEENMAID** have good detergent dispensers and the **ASKO's** bottom basket handle is a good feature. The **AEG** and **F&P Dishdrawer** also continue to be good choices.

■ If you're vision-impaired, look for controls that are large and wide-spaced and labels in a contrasting colour. Positive feedback — beeps and electronic lights — can also be helpful, as are well-defined baskets. The **SIMPSON Eziset 52B870** and the **BLANCO** rated well — they have good controls that are easy to operate. The **WESTINGHOUSE** models are also still good.

■ For those with a cognitive impairment, simplicity is the key and the **WESTINGHOUSE SB907**, **SIMPSON Eziset 52B870** and **BOSCH SGS4332AU** are recommended — each has essentially a one-touch start.

## Don't believe everything you read

We took a look at the brochures that came with the newly tested models to see how their claims stacked up against our test results. What did we find?

■ The **ASKO** claims it "exceeds at... cleaning dirty dishes", but in our tests it washed the worst of the lot.

■ **BOSCH SGS4332AU's** "whisper quiet operation" indeed was — it was one of the quietest tested (though, of course, we're not exactly sure how quiet a whisper is).

■ The **DISHLEX DX403** says it "...delivers superior drying performance" and it did, scoring 92% — though eight other models in the table get a higher drying score.

■ The **KLEENMAID** says it has a "unique detergent dispenser", but the **BLANCO's** is exactly the same.

■ And while the **SIMPSON Eziset 52B870** also promises to be "whisper quiet", in testing its noise levels were the same as the average dishwasher.

## WHAT TO BUY

|                                                       |        |
|-------------------------------------------------------|--------|
| † <b>BLANCO BFDW6W</b>                                | \$1330 |
| (see footnote (A), page 39, for similar models)       |        |
| <b>ELECTROLUX Gallery ESI 6110X</b> (stainless steel) | \$1665 |
| (see footnote (B), page 39, for similar models)       |        |
| <b>WESTINGHOUSE SB915WJ</b> <b>BEST BUY</b>           | \$1096 |
| (see footnote (C), page 39, for similar models)       |        |
| <b>MAYTAG Jetclean MJD2000AAW</b> <b>BEST BUY</b>     | \$1209 |
| (see footnote (D), page 39, for similar models)       |        |
| <b>AEG Favorit 60820</b>                              | \$1779 |
| † <b>KLEENMAID DW20W</b>                              | \$1699 |
| (see footnote (E), page 39, for similar models)       |        |
| <b>WESTINGHOUSE SB907WJ</b> <b>BEST BUY</b>           | \$981  |
| (see footnote (F), page 39, for similar models)       |        |
| <b>DISHLEX DX302WB</b> <b>BEST BUY</b>                | \$1097 |
| (see footnote (G), page 39, for similar models)       |        |
| † <b>HAIER HDW101WH</b> <b>BEST BUY</b>               | \$649  |
| (see footnote (H), page 39, for similar models)       |        |

† new this test

A Best Buy is a good performer whose purchase price and running costs combined are among the lowest in the test. The **HAIER** is a standout Best Buy, with a purchase price plus 10-year running costs totalling less than \$1500; all the other Best Buys total less than \$2000 for this.

The other models in the above list are top performers but cost more to buy and/or run.

"Similar" models are technically the same as the model tested and would get the same scores in our tests, but have different features or finishes (such as stainless steel vs white).



## PERFORMANCE

| Brand / model (in rank order)          | 1 Overall score (%) | 2 Washing score (%) | 3 Drying score (%) | 4 Ease of use score (%) | 5 Energy efficiency score (%) | 6 Water efficiency score (%) | 5 Energy used (kWh)* | 6 Water used (L)* | 7 |
|----------------------------------------|---------------------|---------------------|--------------------|-------------------------|-------------------------------|------------------------------|----------------------|-------------------|---|
| † BLANCO BFDW6W (A)                    | 82                  | 77                  | 98                 | 77                      | 69                            | 83                           | 1.32                 | 16                | 4 |
| ELECTROLUX Gallery ESI 6110X (B)       | 82                  | 80                  | 97                 | 91                      | 62                            | 69                           | 1.58                 | 22                | 4 |
| WESTINGHOUSE SB915WJ (C)               | 82                  | 77                  | 97                 | 90                      | 63                            | 77                           | 1.55                 | 19                | 4 |
| MAYTAG Jetclean MJD2000AAW (D)         | 81                  | 75                  | 88                 | 97                      | 68                            | 77                           | 1.37                 | 19                | 4 |
| AEG Favorit 60820                      | 80                  | 72                  | 96                 | 100                     | 64                            | 66                           | 1.51                 | 23                | 4 |
| † KLEENMAID DW20W (E)                  | 80                  | 74                  | 90                 | 77                      | 75                            | 83                           | 1.13                 | 16                | 4 |
| WESTINGHOUSE SB907WJ (F)               | 80                  | 75                  | 94                 | 90                      | 63                            | 75                           | 1.53                 | 20                | 4 |
| DISHLEX DX302WB (G)                    | 79                  | 70                  | 90                 | 95                      | 63                            | 76                           | 1.54                 | 19                | 4 |
| † HAIER HDW101WH (H)                   | 79                  | 72                  | 89                 | 73                      | 71                            | 89                           | 1.27                 | 14                | 4 |
| † ASKO D3350 (J)                       | 78                  | 63                  | 76                 | 93                      | 86                            | 90                           | 0.77                 | 14                | 4 |
| † DISHLEX DX403WB (K)                  | 78                  | 78                  | 92                 | 98                      | 56                            | 58                           | 1.78                 | 26                | 4 |
| † SIMPSON Eziset 52B870WJ (L)          | 78                  | 73                  | 89                 | 91                      | 62                            | 75                           | 1.57                 | 20                | 4 |
| WESTINGHOUSE Virtuoso SB925SJ          | 78                  | 78                  | 94                 | 90                      | 57                            | 57                           | 1.75                 | 26                | 4 |
| BOSCH SGS4072AU (M)                    | 77                  | 77                  | 94                 | 69                      | 63                            | 69                           | 1.52                 | 22                | 4 |
| DISHLEX DX102WB (N)                    | 76                  | 78                  | 74                 | 95                      | 61                            | 70                           | 1.59                 | 21                | 4 |
| MIELE G638SC Plus (P)                  | 76                  | 70                  | 73                 | 95                      | 76                            | 75                           | 1.11                 | 19                | 4 |
| † BOSCH SGS4332AU (Q)                  | 75                  | 77                  | 92                 | 65                      | 56                            | 69                           | 1.76                 | 22                | 4 |
| FISHER & PAYKEL Dishdrawer DD603ZW (R) | 75                  | 75                  | 94                 | 80                      | 53                            | 60                           | 1.88 (R)             | 25 (R)            | 4 |
| † SIMPSON Eziset 52B850WJ (S)          | 75                  | 75                  | 74                 | 95                      | 60                            | 69                           | 1.64                 | 22                | 4 |
| WHIRLPOOL 6ADP540WH (T)                | 74                  | 70                  | 80                 | 55                      | 85                            | 78                           | 0.79                 | 18                | 5 |
| SIMPSON Eziset 52B890WJ (U)            | 71                  | 75                  | 67                 | 95                      | 57                            | 59                           | 1.74                 | 25                | 4 |

## How reliable have subscribers found them?

We asked subscribers whether their dishwasher (bought in or after 1996) had needed repairs in the previous 12 months. Overall, 15% had needed repairing, making dishwashers one of the less reliable appliances in our survey.

Differences of 7% or more are meaningful. The numbers in brackets are the number of responses we received for each brand.

### PERCENTAGE NOT NEEDING REPAIR

|                        |    |
|------------------------|----|
| Bosch (409)            | 92 |
| Miele (628)            | 92 |
| AEG (179)              | 90 |
| Blanco (147)           | 89 |
| Simpson (268)          | 89 |
| Dishlex (1463)         | 86 |
| Whirlpool (181)        | 86 |
| Kleenmaid (225)        | 85 |
| Westinghouse (331)     | 85 |
| Asko (592)             | 81 |
| Smeg (168)             | 80 |
| Fisher & Paykel (1273) | 79 |

## NEED MORE INFORMATION?

For information on what to look for when buying a dishwasher, see CHOICE, Jan/Feb 2004, or, if you're a personal CHOICE subscriber, go to [www.choiceextra.com.au](http://www.choiceextra.com.au) and click on Jan/Feb 04 under 'dishwashers' in the index. You also have access there for a limited time to our interactive **Compare-a-dishwasher** feature: just type in your preferences and it'll find you some models to match. If you don't have the Jan/Feb 2004 issue or access to the internet, call our Consumer Services people toll-free on 1800 069 552 and we'll send you a copy (obviously we can't send you Compare-a-dishwasher).



| Choice time (minutes)* | 8 FEATURES                   |                            |                   |                   | SPECIFICATIONS             |                    |                |         |                  |           |                             | COSTS                           |              |
|------------------------|------------------------------|----------------------------|-------------------|-------------------|----------------------------|--------------------|----------------|---------|------------------|-----------|-----------------------------|---------------------------------|--------------|
|                        | Height-adjustable top basket | Foldable / removable times | Anti-flood device | Concealed element | Dimensions (H x W x D, cm) | 9 Water connection | Place settings | 10 Type | Warranty (years) | Origin    | Manufacturer / distributor  | 11 Running cost (\$ / 10 years) | Price (\$)** |
| 7                      | ✓                            |                            | ✓                 | ✓                 | 82 x 60 x 57               | C rec              | 12             | FW      | 2                | France    | Major Electrical Appliances | 724                             | 1330         |
| 7                      | ✓                            |                            | ✓                 | ✓                 | 82 x 60 x 58               | C rec              | 12             | BI      | 2                | Italy     | Electrolux                  | 865                             | 1665         |
| 5                      | ✓                            | F                          | ✓                 | ✓                 | 82 x 60 x 59               | C rec              | 12             | BI      | 2                | Australia | Electrolux                  | 849                             | 1096         |
| 4                      | ✓                            | F, R                       | ✓                 | ✓                 | 85 x 60 x 60               | H or C             | 12             | FW / BI | 2                | Italy     | Maytag                      | 750                             | 1209         |
| 2                      | ✓                            | F                          | ✓                 | ✓                 | 85 x 60 x 60               | H or C             | 12             | FW      | 3                | Germany   | Andi Co                     | 827                             | 1779         |
| 5                      | ✓                            |                            | ✓                 | ✓                 | 86 x 60 x 57               | C only             | 12             | FW      | 5                | France    | Kleenmaid                   | 618                             | 1699         |
| 5                      | ✓                            | F                          | ✓                 | ✓                 | 82 x 60 x 59               | C rec              | 12             | BI      | 2                | Australia | Electrolux                  | 838                             | 981          |
| 5                      | ✓                            | F                          | ✓                 | ✓                 | 82 x 60 x 61               | C rec              | 12             | BI      | 2                | Australia | Electrolux                  | 843                             | 1097         |
| 3                      | ✓                            |                            | ✓                 | ✓                 | 85 x 60 x 60               | H or C             | 12             | FW      | 2                | China     | Haier Electronics           | 696                             | 649          |
| 6                      |                              | F                          | ✓                 | ✓                 | 82 x 60 x 57               | H or C             | 14             | BI      | 2                | Sweden    | Asko Appliances             | 423                             | 1999         |
| 1                      | ✓                            | F                          | ✓                 | ✓                 | 82 x 60 x 59               | C rec              | 12             | BI      | 2                | Australia | Electrolux                  | 972                             | 1212         |
| 2                      | ✓                            |                            | ✓                 | ✓                 | 82 x 60 x 59               | C rec              | 12             | BI      | 2                | Australia | Electrolux                  | 861                             | 981          |
| 4                      | ✓                            | F                          | ✓                 | ✓                 | 82 x 60 x 59               | C rec              | 12             | BI      | 2                | Australia | Electrolux                  | 958                             | 1328         |
| 4                      | ✓                            |                            | ✓                 | ✓                 | 85 x 60 x 60               | C rec              | 14             | FW / BI | 2                | Germany   | Bosch                       | 833                             | 999          |
| 6                      |                              | F                          | ✓                 | ✓                 | 82 x 60 x 58               | C rec              | 12             | BI      | 1                | Australia | Electrolux                  | 872                             | 981          |
| 3                      | ✓                            | R                          | ✓                 | ✓                 | 85 x 60 x 60               | H or C             | 12             | FW      | 2                | Germany   | Miele                       | 608                             | 1399         |
| 7                      | ✓                            |                            | ✓                 | ✓                 | 85 x 60 x 60               | C rec              | 14             | FW      | 2                | Germany   | Bosch                       | 963                             | 1099         |
| 8                      |                              | R                          | ✓                 | ✓                 | 82 x 60 x 58 (R)           | C rec              | 14 (R)         | BI      | 2                | NZ        | Fisher & Paykel             | 1028 (R)                        | 1449 (R)     |
| 6                      | ✓                            | F                          | ✓                 | ✓                 | 82 x 60 x 58               | C rec              | 12             | BI      | 1                | Australia | Electrolux                  | 895                             | 865          |
| 9                      |                              |                            | ✓                 | ✓                 | 85 x 60 x 60               | H or C             | 12             | FW / BI | 2                | Germany   | Whirlpool                   | 431                             | 999          |
| 6                      | ✓                            | F                          | ✓                 | ✓                 | 82 x 60 x 58               | C rec              | 12             | BI      | 2                | Australia | Electrolux                  | 952                             | 1097         |

All the models in the table have the basic white finish except the Electrolux Gallery ESI 6110X, which is stainless steel.

† Newly tested models.

\* "Normal" or auto-sense wash.

\*\* Prices are recommended retail, as provided by manufacturers in October and November 2004.

(A) Also available as the BSDW6K; semi-integrated, with a stainless steel control panel, \$1402.

(B) Also available as the ESI 6110U with a textured aluminium finish, \$1665.

(C) Also available as the SB915KJ with a black finish, \$1096; and the SB915J with a stainless steel finish, \$1212.

(D) Also available as the MID3000AAW, which may be quieter and has extra features, \$1351.

(E) Also available as the DW20X with a stainless steel finish, \$1999.

(F) Also available as the SB907S with a stainless steel finish, \$1096.

(G) Also available as the DX3025B with a stainless steel finish, \$1212.

(H) Also available as the HDW101SS with a stainless steel finish, \$799.

(I) Similar model (same model number) with a stainless steel finish, \$1099.

(K) Also available as the DX403WB, semi-

integrated with a white control panel, \$1387; and the DX4035B with a stainless steel finish, \$1387.

(L) Also available as the 52B890S with a stainless steel finish, \$1097.

(M) Also available as the SGU4025AU with a stainless steel finish, \$1199.

(N) Also available as the DX1025B with a stainless steel finish, \$1097.

(P) Also available as a semi-integrated model, G6385CI Plus, with a white, black, aluminium or stainless steel control panel, \$1599.

(Q) Also available as the SG4335AU with a stainless steel finish, \$1299.

(R) Also available as the DD603i, an integrated model, \$1649; DD603 (ss) with a stainless steel finish, \$1699; and DD603 (m) with an Iridium finish, \$1699.

**Water and energy use, price, running costs, dimensions and place settings are for two Dishdrawers, to make results comparable with the other models. You can buy just a single drawer, which has the model number DD603.**

(S) Also available as the 52B890S with a stainless steel finish, \$981.

(T) Also available as the 64DP8540IX with a stainless steel finish, \$1199.

(U) Also available as the 52B890S with a stainless steel finish, \$1212.

## 1 Overall score

This is a combination of the following scores, weighted as follows:

- Washing performance: 30%
- Drying performance: 25%
- Ease of use: 15%
- Energy efficiency: 15%
- Water efficiency: 15%

## 2 to 7

See notes 2 to 7 with the table in CHOICE, Jan/Feb 2004, for information on what was tested and measured to achieve these scores. Or go to [www.choiceextra.com.au](http://www.choiceextra.com.au) and click on Jan/Feb 04 under 'dishwashers' in the index.

## 8 Features

See the Jan/Feb 2004 issue (or go to [www.choiceextra.com.au](http://www.choiceextra.com.au)) for more on the features listed in the table.

"R" means the tines are removable, "P" that they can be folded down.

## 9 Water connection

- H or C: You can connect the dishwasher to hot or cold water.
- C rec: The manufacturer recommends connection to a cold tap, and the dishwasher heats the water itself (all dishwashers have a heater).

■ C only: You can only connect to the cold tap.

See the Jan/Feb 2004 article or go to [www.choiceextra.com.au](http://www.choiceextra.com.au) for the pros and cons of connection to hot or cold water.

## 10 Type

- FW: Freestanding, with a worktop (can generally be built-in as well).
- BI: Built-in (some mightn't have top or side outer panels).

Some models are also available as semi-integrated (you can fit a front panel to the door to match the rest of your kitchen cupboard doors) or fully integrated (the whole front of the machine can match your kitchen, with the controls hidden inside the door). See the table footnotes for availability details.

## 11 Running cost

This is an estimate of how much it'll cost you to run the machine over 10 years for water and electricity if you run one full load every day using the 'normal' cycle. The calculations are based on 15 cents per kWh for electricity and \$1 per 1000 L for water. To simplify, we haven't included depreciation or interest costs, or the cost of detergent.



# Room for improvement

Many digital camcorders still don't take full advantage of the technology.

## IN A NUTSHELL

- On test: 24 digital camcorders costing around \$700 to \$2400.
- Only the top performers provide picture quality comparable to DVDs.
- The built-in microphone often records the camcorder's running noises. Using an external microphone helps in most cases — if your model lets you attach one.

Camcorders have been following the trend of many digital products — they've become more affordable. In past tests, you usually had to spend more than \$3000 to buy one of our top performers. This time there are hardly any models costing more than \$2000.

## WHAT YOU GET

If you're tempted to buy a digital camcorder, you can expect to get:

- **Picture quality** that's clearly better than that of even highband analogue systems (now well and truly superseded by digital models). However, many of the tested models don't fully use the potential of the technology, for example lacking sharpness or not recording true colours. Only the top scorers record video in a quality similar to that of a DVD player.
- **Potentially hi-fi-quality sound.** However, only a few of the built-in microphones realise that potential — many camcorders suffer from their small size and can't avoid recording disturbing running noises from the tape or disc drive, or the zoom motor.

On most models this can be improved by using an external microphone, and if good-quality sound's important to you or you expect to make many 'natural sound' recordings (without voiceover, background music or similar), we recommend you look for a model that lets you connect one.

- Amazingly small and lightweight camcorders packed with generally **easy-to-use** menu-controlled features and functions. However, be aware that most models are designed to be held with the right hand and using the right eye to look through the viewfinder. So if you're left-handed, check which model you're comfortable with. On most models you access the function menus via buttons or a joystick. Some have a touchscreen monitor, which is usually a bit slower.
- The ability to **play back** your recordings on your TV, and to transfer them to a computer for near-professional editing (if you have the necessary software) without loss of quality (see *Which connection?*, right, for the different connection options).



■ The ability to take **still photos** on the tape/disc and/or a memory card. However, the photo quality is generally clearly worse than that of a good digital still camera — not only because of the comparatively low resolution (usually less than two megapixels), but also because the same lens system is used for video and still photo recordings, which leads to compromises with the exposure and white balance settings.

## WHICH CONNECTION?

Depending on how you want to use your camcorder, you need the following connections.

### ■ Television

Playing back your recordings on a conventional TV requires the digital video to be translated into analogue signals, which means a loss of quality.

All the models have a standard audio/video (AV) output and come with an AV cable you can connect to your TV. All (except the **CANON MV700i**) also have a higher-quality super-video (S-video) output. But you need a TV or VCR with S-video input, and a special S-video cable.

If the camcorder has AV or S-video inputs (see the table, page 44, for models), you can use it to record TV programs or digitalise your analogue VCR recordings (for example, if you want to edit them digitally, or for safer storage).

### ■ Computer

You can transfer your recordings digitally to your computer without loss of quality.

All the tested models except those that record onto DVD (see *Camcorder systems*, page 42) have a digital video (DV or 'firewire') output. You need a fairly powerful computer and special software (provided with almost all the camcorders) to transfer video recordings.

On models with a DV input (see the table), you can also transfer your edited recordings from the computer back onto tape without loss of quality.

If you can't use the digital video connection, the USB connection available on all but the **CANON MV700i** and **SHARP VL-Z100ES** is the next best option. But the transfer is much slower and involves a loss of quality. USB is mainly used for the transfer of still photos from the memory card to the computer.

## What to buy

The top-rating models are profiled in rank order. Prices are recommended retail, as provided by manufacturers in October 2004.



### SONY DCR-PC109

Price: \$1799

#### GOOD POINTS

- Best picture quality.
- Good image stabiliser (helps prevent 'shaky' recordings).
- Good sound quality with built-in microphone.
- Long recording time.
- Well equipped.
- Small and lightweight.

#### BAD POINTS

- No external battery charger.
- Long still photo shutter delay, making it hard to take spontaneous pictures.



### CANON MVX25i

Price: \$1799

#### GOOD POINTS

- Good picture quality.
- Good sound quality with built-in microphone.
- Well equipped.

#### BAD POINTS

- Comparatively short recording time.
- No external battery charger.
- Long still photo shutter delay.



### PANASONIC NV-GS200

Price: \$2419

#### GOOD POINTS

- Good picture quality.
- Good image stabiliser.
- Good sound quality with built-in microphone.
- Longest recording time of all the tested models.
- Short still photo shutter delay.
- Well equipped.

#### BAD POINTS

- None to mention.



### SONY DCR-HC40

Price: \$1599

#### GOOD POINTS

- Good picture quality.
- Equal-best sound quality with built-in microphone.
- Low wind sensitivity also helps give good sound.
- Well equipped.
- Small and lightweight.

#### BAD POINTS

- No external battery charger.
- Long still photo shutter delay.

## CAMCORDER SYSTEMS

If you want to buy a camcorder, you're faced with a range of different systems:

- **Mini DV:** This is currently the most commonly used digital format. Small cassettes allow very compact camcorders, and can store 60–80 minutes of high-quality video (depending on the tape).
- **Digital-8:** Uses analogue Hi-8 tape (making Digital-8 models bulkier than other digital camcorders), but digital recording technology. A 90-minute Hi-8 tape can store 60 minutes of high-quality digital video.
- **DVD:** Uses an 8 cm DVD-RAM, a DVD-RW or a DVD-R instead of a tape to record video and photos. The first two discs can be recorded on many times, the latter only once. The DVD-RAM can store only 36 minutes of video on the best-quality setting (18 minutes on each side, and you have to turn the disc), and the DVD-RW only 20 minutes. A DVD-RW can be played on most DVD players and computer drives.

If your computer has a DVD-RAM or DVD-RAM-playable DVD-ROM drive (common on modern computers), you can play a DVD-RAM disc directly in your computer. If not, you can transfer the recording via USB connection. Only a few DVD players can play DVD-RAM discs.

A DVD-RAM is fairly expensive. However, you only need the one supplied with the camera. Once you've edited your recordings, you can save them permanently onto a cheaper DVD-R, which can only be written to once, and can be played in a computer DVD drive or on a DVD player.

Accessing recorded scenes is much quicker than by winding a tape. And as the camcorder only uses empty disc space for recordings, there's no risk of 'taping' over existing recordings.

## What to look for

If you think a digital camcorder is for you, consider the following before you buy:

- **Which system** do you want (see *Camcorder systems*, left, for the differences)?
- Go to a shop and **try out** the models you're interested in, especially if you're left-handed — most models are designed for right-hand use, but the **JVC GR-DX77** in this test is for left-handers as well.
- An **external microphone** usually provides much better sound quality than a built-in one, so if very high audio quality is important to you, make sure the camcorder you're interested in allows you to connect one.
- A **wind filter** further improves sound quality in windy conditions.
- If you're planning to film a lot, you may prefer a camcorder that allows you to remove the battery and charge it in a **separate charger** while you carry on filming with another battery, rather than having to hook up the whole camcorder to the power supply. That's particularly true for models with relatively short battery operating times (see the table, page 44, for battery scores and charging options).

## FEATURES AND FUNCTIONS

Think about which ones you need, and make sure the model you're interested in has them all. Some models are packed with features you may never use, so there's no point paying for them.

### ACCESSORIES

#### All have:

- Instruction manual.
- Lens protector.
- Rechargeable lithium-ion battery and charger.
- AV cable
- USB cable (except the **CANON MV700i** and **SHARP VL-Z100ES**).
- CD-ROM with data transfer and/or editing software (except the **CANON MV700i** and **SHARP VL-Z100ES**).

#### Some have (see the table for model details):

- **Accessory shoe:** Models with a tick in the table allow you to attach things like an external microphone or a video lamp to the camera.
- **Memory card** to record photos and (sometimes) video clips. Depending on the picture quality you choose and the model, you can store around three to 200 photos, or between 20 seconds and eight minutes of video clips on an 8 MB card.
- **Video lamp/photo flash:** These allow you to film or take still photos in low-light conditions.

### CONNECTIONS

Think about which connections to your TV and computer you'll use, and make sure the model you're interested in has them. Get all the necessary cables when buying the camcorder. For example, only AV and USB cables come as standard with most of the tested models.

#### All have:

- Power connection.



Audio/video (AV) and S-video output (the **CANON MV700i** doesn't have S-video) to play back recordings on your TV.

All but the DVD models have a DV or 'firewire' output to transfer recordings to a computer for editing.

A USB connection to transfer recordings to a computer for editing (except the **CANON MV700i** and **SHARP VL-Z100ES**, which only have DV output).

**Some have (see the table for model details):**

Headphone output: Headphones allow you to monitor the sound quality as it's recorded.

AV/S-video/DV inputs: You can record from your TV using the AV or S-video inputs. The DV input lets you record a video back onto tape once you've edited it on your computer.

Input for an external microphone.

#### DISPLAYS

**All have:**

LCD colour monitor with adjustable brightness. They can all be swivelled to face forward, so you can easily film yourself. All the monitors in this test are between 48 and 51 mm wide, and between 36 and 38 mm high, except on the **SONY DCR-HC85** (70 x 52 mm).

Diopetre-adjustable viewfinder. Viewfinders can be awkward to use if you're wearing glasses. This feature lets you adjust the viewfinder to your eyesight (similar to

artificial light) in order to obtain a natural colour balance. You're likely to use the manual setting only in extreme lighting situations.

Automatic exposure programs (at least four), such as sports or portrait photo. The camcorder will pick a suitable aperture and shutter speed for the selected standard situation.

Digital picture effects (such as black-and-white, sepia, negative or 16:9 cinema recording): While some models have only one effect, most have five or more.

Long-play mode. This lets you record at reduced speed so you can fit more on a tape. However, the picture quality won't be as good.

Full auto recording: Point-and-shoot function where you don't have to worry about setting anything manually.

Time code: This feature gives each picture frame an invisible digital marking that allows you to edit very accurately.

**Some have (see the table for model details):**

Video clip recording onto memory card.

Timer: Allows you to start recording after a certain time — for example, if you want to film yourself.

Manual shutter speed setting allows more creativity than automatic settings (which all models have) when taking photos.

Night shot: Most models achieve fairly good picture quality in quite poor light conditions. Some models

(this test) have an infrared lamp that takes recordings even in complete darkness. It only works well with objects less than about 1m away. Some models produce a monochrome (black-and-white) picture. Models with a tick in this column produce colour recordings even in very low light.

**DES**

Forward, rewind, stop, pause, search. Arch modes (for example, to search for a tape, or a certain date).

External microphone.

**See the table for model details:**

Two stereo tracks allow you to record narration in addition to the original sound

#### ROL

The **CANON MV700i** and **SHARP VL-Z100ES** come with a remote that lets you control playback functions plus additional functions, which may be available via the remote only.

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## CHOICE SHOPPER

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## PERFORMANCE

| Brand / model (in rank order) | 1 Overall score (%) | 2 Picture quality score (%) | 3 Sound quality score (%) | 4 Ease of use score (%) | 5 Versatility score (%) | 6 Autofocus score (%) | 7 Photo to memory card score (%) | 8 Battery score (%) |
|-------------------------------|---------------------|-----------------------------|---------------------------|-------------------------|-------------------------|-----------------------|----------------------------------|---------------------|
| SONY DCR-PC109                | 73                  | 81                          | 67                        | 71                      | 78                      | 54                    | 63                               | 75                  |
| CANON MVX25i                  | 71                  | 79                          | 66                        | 67                      | 80                      | 54                    | 67                               | 48                  |
| PANASONIC NV-GS200            | 71                  | 74                          | 68                        | 67                      | 81                      | 58                    | 65                               | 85                  |
| SONY DCR-HC40                 | 71                  | 71                          | 71                        | 73                      | 78                      | 59                    | 60                               | 68                  |
| SONY DCR-HC85                 | 69                  | 71                          | 70                        | 69                      | 85                      | 56                    | 62                               | 48                  |
| PANASONIC NV-GS120            | 67                  | 64                          | 71                        | 67                      | 71                      | 62                    | 66                               | 78                  |
| SONY DCR-HC30                 | 67                  | 60                          | 71                        | 72                      | 78                      | 58                    | 51                               | 75                  |
| HITACHI DZ-MV580E             | 66                  | 70                          | 64                        | 67                      | 54                      | 64                    | 54                               | 77                  |
| JVC GR-D230                   | 65                  | 70                          | 57                        | 68                      | 73                      | 53                    | 58                               | 55                  |
| PANASONIC VDR-M70GC           | 65                  | 75                          | 56                        | 63                      | 57                      | 53                    | 54                               | 75                  |
| PANASONIC VDR-M50             | 64                  | 69                          | 60                        | 64                      | 56                      | 61                    | 48                               | 78                  |
| CANON MVX250i                 | 63                  | 65                          | 57                        | 67                      | 71                      | 54                    | 59                               | 57                  |
| PANASONIC NV-GS15             | 63                  | 56                          | 68                        | 67                      | 71                      | 56                    | 53                               | 73                  |
| SONY DCR-DVD201               | 63                  | 65                          | 63                        | 62                      | 55                      | 66                    | 57 (A)                           | 78                  |
| PANASONIC NV-GS11             | 62                  | 56                          | 68                        | 67                      | 62                      | 56                    | na                               | 73                  |
| SONY DCR-TRV460               | 61                  | 59                          | 62                        | 65                      | 72                      | 53                    | 50                               | 50                  |
| CANON MV750i                  | 60                  | 55                          | 65                        | 60                      | 69                      | 53                    | 67                               | 53                  |
| JVC GR-D53                    | 60                  | 66                          | 47                        | 66                      | 55                      | 55                    | na                               | 53                  |
| JVC GR-D73                    | 60                  | 66                          | 47                        | 66                      | 62                      | 55                    | 52                               | 53                  |
| JVC GR-DX77                   | 60                  | 56                          | 59                        | 71                      | 72                      | 48                    | 51                               | 54                  |
| SONY DCR-TRV265               | 60                  | 59                          | 62                        | 66                      | 57                      | 53                    | na                               | 50                  |
| CANON MV700i                  | 58                  | 57                          | 62                        | 64                      | 49                      | 47                    | na                               | 54                  |
| SHARP VL-Z500ES               | 55                  | 51                          | 46                        | 65                      | 62                      | 34                    | 56                               | 76                  |
| SHARP VL-Z100ES               | 51                  | 51                          | 46                        | 57                      | 43                      | 34                    | na                               | 76                  |

\* Including battery, recording medium and hand strap; rounded to the nearest 10 g.

\*\* In transport position, with battery and hand strap; rounded up to the next 0.5 cm.

† Recommended retail, according to manufacturers in October 2004.

na Not applicable — no memory card.

(A) Based on recording photos onto the DVD.

(B) Memory card slot, but no card provided.

(C) MPEG4.

### 1 Overall score

The overall score is a combination of the following:

- Picture quality: 35%.
- Sound quality: 20%.
- Ease of use: 20%.
- Versatility: 10%.
- Autofocus: 5%.
- Photo to memory card: 5%.
- Battery time: 5%.

If a camcorder can't record photos to a memory card, it didn't score zero; instead the weighting for this score was distributed evenly across all the other scores.

### 2 Picture quality score

The main picture quality assessments were:

- A viewing panel assessed the sharpness, colour and overall image quality of recordings in daylight and artificial light.
- A panel assessed macro recordings, recordings

made in low-light conditions and — where applicable — at night.

- Resolution (picture sharpness).
- On all the tested models you can activate a function that stabilises the picture in situations where you'd otherwise be likely to produce a shaky recording (for example, during telephoto recordings and slow pans). We checked how well the function works, and whether the stabilising effect has any negative impact on picture quality.

### 3 Sound quality score

A panel assessed the quality of speech and music recorded with the built-in and an external microphone (where applicable). We also looked at the recorders' sensitivity to wind noise.

### 4 Ease of use score

A user panel assessed the instructions, the ease of various recording and playback functions, the

## 10 FEATURES

## SPECIFICATIONS

| External battery charger | Accessory shoe | Memory card slot (8 MB card provided) | Video lamp / photo flash | Headphone output | AV / S-video / DV input | Input for external microphone | Records video clips on memory card | Timer | Manual shutter speed setting | Night shot | Stereo audio tracks | 11 System | 12 Max. zoom factor (optical / digital) | Weight (g) * | Dimensions (W x H x L, cm) ** | Warranty (years) | Price (\$)? |
|--------------------------|----------------|---------------------------------------|--------------------------|------------------|-------------------------|-------------------------------|------------------------------------|-------|------------------------------|------------|---------------------|-----------|-----------------------------------------|--------------|-------------------------------|------------------|-------------|
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 120                                | 460          | 6.5 x 10 x 10                 | 1                | 1799        |
| ✓                        | ✓              | ✓                                     | ✓ / ✓                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 14 / 280                                | 670          | 8.5 x 8.5 x 14                | 1                | 1799        |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓ (C)                              | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 500                                | 570          | 8 x 7.5 x 14.5                | 1                | 2419        |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 120                                | 470          | 6.5 x 9.5 x 11.5              | 1                | 1599        |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 120                                | 720          | 7.5 x 9 x 18                  | 1                | 2349        |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | X / X / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 500                                | 550          | 8 x 7.5 x 14                  | 1                | 1979        |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 120                                | 460          | 6.5 x 9 x 11.5                | 1                | 1299        |
| ✓                        | ✓              | ✓ (B)                                 | X / X                    | ✓                | ✓ / ✓ / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 1                   | DVD-RAM   | 10 / 240                                | 600          | 7.5 x 9 x 17                  | 1                | 1895        |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓ (C)                              | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 500                                | 560          | 7 x 10 x 13                   | 1                | 1499        |
| ✓                        | ✓              | ✓ (B)                                 | X / X                    | ✓                | ✓ / ✓ / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 1                   | DVD-RAM   | 10 / 240                                | 600          | 7.5 x 9 x 17                  | 1                | 1979        |
| ✓                        | ✓              | ✓ (B)                                 | X / X                    | ✓                | X / X / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 1                   | DVD-RAM   | 18 / 500                                | 590          | 7.5 x 9 x 17                  | 1                | 1759        |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 18 / 360                                | 590          | 8 x 8 x 14                    | 1                | 1499        |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | X / X / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 24 / 800                                | 500          | 7 x 8.5 x 12.5                | 1                | 1319        |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | ✓ / ✓ / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 1                   | DVD-RW    | 10 / 120                                | 590          | 6.5 x 9 x 13.5                | 1                | 1899        |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | X / X / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 24 / 800                                | 500          | 7 x 8.5 x 12.5                | 1                | 1099        |
| ✓                        | ✓              | ✓ (B)                                 | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Digital-8 | 20 / 990                                | 940          | 9 x 10 x 16                   | 1                | 899         |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 22 / 440                                | 590          | 6.5 x 10 x 15                 | 1                | 1199        |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 16 / 700                                | 600          | 8 x 9 x 13                    | 1                | 949         |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 16 / 700                                | 600          | 8 x 9 x 13                    | 1                | 1099        |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓ (C)                              | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 12 / 700                                | 530          | 6.5 x 9.5 x 10.5              | 1                | 1299        |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | X / X / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Digital-8 | 20 / 990                                | 910          | 9 x 10 x 16                   | 1                | 699         |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | ✓ / X / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 18 / 360                                | 590          | 6.5 x 10 x 15                 | 1                | 799         |
| ✓                        | ✓              | ✓                                     | ✓ / X                    | ✓                | ✓ / ✓ / ✓               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 700                                | 560          | 8.5 x 8.5 x 10.5              | 1                | 1099        |
| ✓                        | ✓              | ✓                                     | X / X                    | ✓                | X / X / X               | ✓                             | ✓                                  | ✓     | ✓                            | ✓          | 2                   | Mini-DV   | 10 / 500                                | 560          | 8.5 x 8.5 x 10.5              | 1                | 989         |

quality and functionality of the viewfinder, LCD monitor and remote control, the portability of the camcorder, and data transfer to a computer. We also measured the time delay between switching the recorder on and being able to use it.

### 5 Versatility score

We assessed the camcorders against a list of about 50 features and functions.

### 6 Autofocus score

A panel assessed the quality of the autofocus system during normal recording and recording under poor light conditions.

### 7 Photo to memory card score

A panel assessed the quality of still photos recorded on a memory card (where applicable). We also looked at the shutter delay, and the transfer speed to a computer using USB and DV connections.

### 8 Battery score

We measured how long the camcorders' batteries lasted using a recording and playback test cycle simulating typical user behaviour.

### 9 Recording time

The camcorders were set to full-auto recording mode, with the monitor, autofocus and image stabiliser switched on. Every five minutes the zoom was operated three times across the whole range and back, until the battery was empty and the camcorder switched off.

If you get a model with only 1–1.5 hours of recording time (which applies to many of the tested models), you may want to think about buying a second battery.

### 10 Features

See *What to look for*, page 42, for explanations of these and other features.

### 11 System

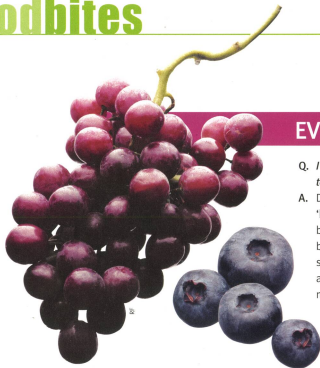
See *Camcorder systems*, page 42, for an explanation of the differences.

### 12 Maximum zoom factor (optical/digital)

With the optical zoom factor, the higher the factor, the bigger the zoom range. Within the limits of the lens, using the optical zoom won't decrease picture quality.

With the digital zoom you can select a part of the picture and enlarge it digitally. The more you enlarge, the grainier the picture gets. So while a digital zoom factor of 500 or more may sound impressive, don't expect a sharp recording of that far-away bird — your recording will look as if it's taken from a spy satellite.





## EVERY CLOUD HAS A SILVER LINING

- Q.** *I've noticed a cloudy coating on grapes and blueberries that I can't seem to wash off. Is it pesticides, and if so, is there any way to get rid of it?*
- A.** Don't worry: the coating is a safe, natural part of the fruit. Known as the 'bloom', the waxy, silvery-white substance on the surface of grapes, blueberries and certain plums acts as a barrier against insects and bacteria and helps to seal in the fruit's moisture. The bloom is also a sign of freshness, since it fades with time and handling. But it's still a good idea to wash produce under running water before eating to minimise exposure to pesticides and bacteria.

## Presto chango — pork is beef

CHOICE has looked at the issue of meat substitution and illegal preservative use in mince in the past, but now the NSW Food Authority has weighed in, checking over 50 butcher shops in Sydney and the Hunter Valley and finding big problems for consumers.

Over 70% of mince samples contained different meats from what was on the label. Pork or mutton found its way into beef mince and pork into lamb mince.

For some consumers it's simply deception, but for others, such as Jewish and Muslim communities who avoid pork for religious reasons, it's of even greater concern.

But it gets worse: 59 out of 101 mince samples contained the preservative sulphur dioxide. Sulphur dioxide can trigger asthma attacks in sensitive people, and while it's allowed in some processed meats it's an illegal preservative in mince.



## Goodies to granny's

The wolf wasn't the only thing Little Red Riding Hood should have been worried about, according to a warning from the Food Safety Information Council (FSIC). Making her elderly relative ill with food poisoning should have crossed her mind too.

There are concerns about the safety of food being brought in for aged-care residents by well-meaning family members and friends. And as elderly people can get sick more easily and more severely than younger people, there are things you should do to be safe, including:

- If you cook something yourself, take particular care to wash and dry your hands first and quickly chill the food once it's cooked — in the fridge, not at room temperature.
- While you're on your way, keep the food cold in a cooler with plenty of ice-bricks.
- Reheat the food thoroughly and make sure it's hot all the way through.
- If the food's not to be eaten immediately, tell staff and have it put in the fridge.
- Shelf-stable foods like plain cakes, biscuits and chocolates are safe kept in the room, but not things like meat, custard or cream-filled cakes and cooked vegetable or meat dishes.

Factsheets with more information on preparing and transporting food safely can be found at [www.foodsafety.asn.au](http://www.foodsafety.asn.au)



# The CHOICE Guide to Digital Photography

Never before has digital photography been more accessible or affordable. This book contains sound advice on all aspects of digital photography, from what camera to buy to how to print or store your pictures once you've captured those special moments.

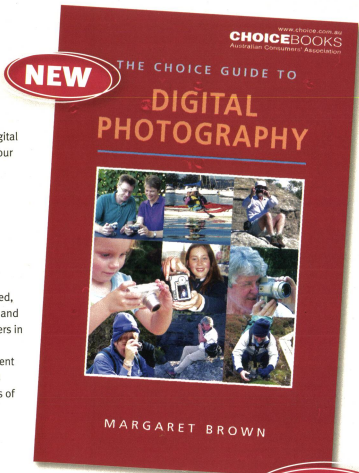
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- Why go digital?
- How does the camera work?
- How do I print my digital photos?
- How do I digitise my photos if I don't own a digital camera?
- How do I send my photos by email?
- How many photos can I fit on my memory card?

Plus an illustrated colour section on how a digital colour is created, how to use the 'scene' menu, how to edit photos on a computer and much more — and it also has a handy contact list of manufacturers in Australia and New Zealand.

Margaret Brown is a technical editor who has written equipment reviews, 'how to' articles on a wide range of photographic topics and published seven pocket guides dealing with various aspects of digital photography.

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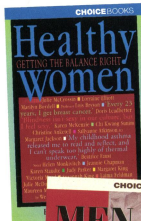
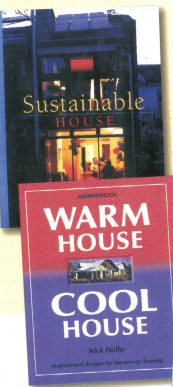
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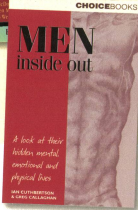
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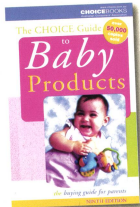
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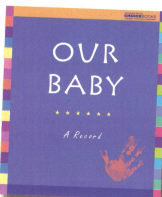


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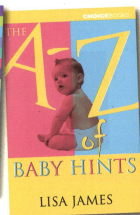
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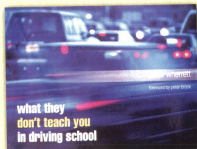


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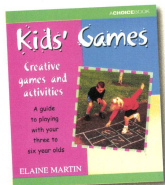


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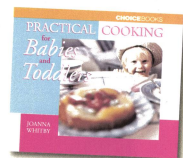
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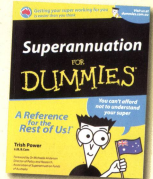
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CB/0502

# recalls&bans

Nowadays there are so many product recalls we may not be able to print all of them in CHOICE. For comprehensive recall information go to the Federal Treasury website: [www.recalls.gov.au](http://www.recalls.gov.au). If you don't have web access, call the Consumer Safety Unit on (02) 6263 2747.

Companies often rent 1800 numbers for a couple of months after a recall is announced. If the number given is no longer operating, phone the manufacturer or retailer direct.

## PRODUCT SAFETY ALERT

### STOVES: Electrolux Home

Products has issued a product safety alert for **Simpson gas and electric stoves**, manufactured between 1992 and 2000 (excluding Simpson Nova, Supa-Nova and Simpson 2001) and **Westinghouse gas and electric stoves**, manufactured between 1983 and 2000.

**The problem:** If these appliances aren't correctly installed by attaching stabilising brackets (supplied at the time of purchase) to the wall, they may tip and cause injury (see *Tipping Stoves*, CHOICE, November 2004).

**What to do:** If you have one of these appliances and are concerned about its installation, call 1800 063 009 weekdays, 8 am to 5 pm EST. Installation instructions and new brackets will be supplied on request. (Also see *Choice Cuts*, page 4, for further info.)

**FOOD:** Nestlé has recalled **Nestlé Choc Bits Dark Chocolate**, all batch codes, in 100 g, 250 g and 375 g sizes only, sold nationally and in New Zealand.

**The problem:** It contains milk protein, which is undeclared on some labels.

**What to do:** If you suffer from a milk protein allergy or intolerance, don't eat it. Return it to the place of purchase for a refund. For more information call 1800 069 678 between 8 am and 6 pm EST.

**FOOD:** Nestlé has recalled **Maggi Frozen Macaroni Cheese**, in a 400 g cardboard packet, best-before date February 18, 2006, lot code 42310319B1.

**The problem:** Some packs may contain pieces of clear, hard plastic.

**What to do:** Don't eat it. Return it to the place of purchase for a refund. For more information call 1800 069 678 between 8 am and 6 pm EST.

**FOOD:** Lowan Whole Foods has recalled **Lowan Whole Foods Soy Flour — Gluten Free**, in a 500 g

polypropylene bag, batch code N 25 10 05 0d, sold in the ACT, NSW, SA and Victoria.

**The problem:** It contains gluten.

**What to do:** If you suffer from a gluten allergy or intolerance, don't eat it. Return it to the place of purchase for a refund, or call 1800 355 718 for more information.

**FOOD:** Kellogg has recalled **Kellogg's Just Right Just Grains breakfast cereal**, in a blue 510 g pack, all best-before dates up to and including September 2005 (shown as SEP 05 16).

**The problem:** Some packs may contain small amounts of almonds, soy and sulphite not stated on the packets.

**What to do:** If you suffer from an allergy or intolerance to almonds, soy or sulphite, don't eat it. Return it to the place of purchase for a refund, or call 1800 000 474 for more information.

**FOOD:** Woolworths/Safeway has recalled **Home Brand Mackerel in Natural Oil**, in a 425 g can, batch code MCN0PFMA0824, sold in the ACT, NSW, Queensland, Tasmania and Victoria.

**The problem:** Some cans may contain unacceptable levels of histamine. The product may have a bitter taste and could cause an upset stomach in some people.

**What to do:** Don't eat it. Return it to your nearest Woolworths, Safeway or Food For Less supermarket for a refund. For more information call 1800 638 434.

**FOOD:** Woolworths/Safeway has recalled **Woolworths/Safeway Freshness Guaranteed Fruity Muesli Cookies**, in a 400 g clear bag with attached label, best-before date 17 March 05.

**The problem:** Instead of Fruity Muesli Cookies, some packages contain **Choc Peanut Brownies**. As a result, the presence of peanuts isn't declared on the label.

**What to do:** If you suffer from a peanut allergy or intolerance, don't eat them. Return them to your nearest Woolworths, Safeway or Food For Less supermarket for a refund. For more information call 1800 638 434.

**FOOD:** Gourmet Organic Herbs has recalled **Gourmet Organic Herbs White Peppercorns**, in 60 g sachets and glass jars, best-before dates between 06 06 and 26 10 06, sold in NSW, Queensland, SA and Victoria in organic, specialty and healthfood stores. All batch numbers start with 058 then two sets of two digits, eg 058 01 01.

**The problem:** Overseas testing indicated that they may be contaminated with salmonella. Despite testing negative when imported into Australia, they're being recalled as a precaution.

**What to do:** Don't use it. Return it to the place of purchase for a refund, or call (02) 9403 5306 for more information.

**FOOD:** The Vege Chip Company

has recalled the following **Ajitas Vege Chips**, sold in foil packets, all best-before/use-by dates up to and including 30 June 2005, sold in the ACT, NSW, Queensland, SA, Tasmania, Victoria and WA:

■ Natural, French Onion, Barbeque, Sweet and Sour flavours: 30 g, 50 g, 100 g

■ Chilli, Herb and Garlic flavours:

50 g, 100 g

■ Multi-pack: Natural, French Onion, Barbeque, Sweet and Sour flavours, three packets of 21 g each.

**The problem:** The product makes a gluten-free claim, but some packs may contain gluten.

**What to do:** If you suffer from a gluten allergy or intolerance, don't eat them. Return them to the place of purchase for a refund, or call (07) 5525 0670 for more information.

**TOY:** Big W has recalled **B'Loonies**, a balloon blowing kit, barcode number 075656007741, sold nationally in Big W discount stores between June and September 2004.

**The problem:** It contains solvents that may be harmful if ingested or inhaled. **What to do:** Stop using it. Return it to any Big W store for a refund. For more information call 1800 251 311 weekdays between 8 am and 5 pm EST.

**TOY:** Look Sharp Concepts has recalled its **toy dump truck**, a coloured plastic

truck with two figures inside the cabin, supplied in a mesh bag, item number 19598, barcode number 9316292195982, sold through discount variety stores in NSW, Queensland and Victoria since February 2004.

**The problem:** If dropped or damaged, small parts may break off, becoming a choking hazard.

**What to do:** Immediately remove it from children's reach. Return it to the place of purchase for a refund or exchange. For more information call (02) 9688 1900.

**TOY:** The Warehouse Group has recalled its **plastic sand truck**, barcode number 667788900055, sold through The Warehouse outlets between September 11 and October 6, 2004.

**The problem:** It contains small parts that may cause a choking hazard for children under the age of three.

**What to do:** Immediately remove it from children's reach. Return it to the place of purchase for a refund, or call 1800 254 687 for more information.

**DRINK BOTTLE:** Bensons Trading has recalled **Thomas & Friends plastic drink bottle**, sold in the Thomas & Friends showbag at the Brisbane, Adelaide, Melbourne and Perth Shows during August, September and October 2004.

**The problem:** The pop-top in the lid can easily be removed or unscrewed and presents a choking hazard to children under three.

**What to do:** Immediately remove it from children's reach. Return it by reply-paid post, including your return address, to Bensons Trading, PO Box 685, Reply Paid 685, Sunshine 3020. Bensons will send a replacement lid or a new item of similar value. For more information call (03) 9369 9929.

**CHILDREN'S CHAIR:** Ikea has recalled **Färgglad children's chair**, article number 400.548.40, sold in Ikea stores in NSW, Queensland, Victoria and WA since May 2003.

**The problem:** The red plastic feet on some chairs may not be securely fixed to the legs, and if detached are a choking hazard for young children.

**What to do:** Immediately remove it from children's reach. Return it to your nearest Ikea store for a refund. For more information call Ikea NSW (02) 9315 6400 or (02) 8868 3900; Queensland (07) 3340 2000; Victoria (03) 8416 5000; WA (08) 9242 6467.



## aboutchoice

The Australian Consumers' Association is a non-profit, non-party-political organisation, established in 1959 to provide consumers with information and advice on goods, services, health and personal finances, and to help maintain and enhance their quality of life. It's a Council member of Consumers International.

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## THIRD TIME LUCKY?

The newspaper notice (right) was meant to correct the error in the original ad (above). Confused? We are. Maybe they'll get it right next attempt.

## Customer Apology

On page 7 of this week's Kmart catalogue commencing October 14, we have advertised "Leap Frog Fridge Phonics magnets" at \$29.99.

We wish to advise that the \$30 save stated in the catalogue is incorrect. The regular price of this product is \$9.99, and the catalogue price of \$29.99 represents a saving of \$9.94.

We apologise for any inconvenience to customers.



## 1 minute Oats

### COOKING INSTRUCTIONS

#### Microwave Porridge:

|        | Serves 1                                                     | Serves 2                                      |
|--------|--------------------------------------------------------------|-----------------------------------------------|
| Step 1 | Combine 1/3 cup Oats and 3/4 cup hot water                   | Combine 2/3 cup Oats and 1 1/2 cups hot water |
| Step 2 | Microwave on HIGH for 1 minute                               | Microwave on HIGH for 2 minutes               |
| Step 3 | Stir                                                         | Stir                                          |
| Step 4 | Microwave on HIGH for 40 seconds                             | Microwave on HIGH for 1 1/2 minutes           |
| Step 5 | Serve with milk, honey, dried or pure fruit or chopped nuts. |                                               |

ER, ACTUALLY 1-MINUTE-AND-40 SECOND-OR-MORE OATS ...

ter correction.

**BONUS DVD BURNER Valued at \$400**

**THANK GOODNESS IT'S FREE!**

Why would anyone want to pay for an imitation DVD burner? This error's popped up a few times, no doubt causing some teeth-gnashing in the Imitation office.

Teamwind's balloon rises to 208 meters. Ours rises to 224 meters. How many meters higher is our balloon?

208 + 224 =

208 + 224 =

**FREE PRESENT** 1800 75 5

AUSTRALIAN INSTITUTE OF MATHEMATICS

## A tasty Caesar Salad for lunch?

Available between these times at your IKEA store. (See maps and addresses on the reverse of this brochure.)

**IKEA Moorabbin, Melbourne**  
10 am–12 pm & 2 pm–3 pm

**IKEA Richmond, Melbourne**  
10 am–12 pm & 2.30 pm–5.30 pm

**IKEA Springwood, Brisbane**  
10 am–12 pm & 2 pm–3 pm



## Apparently Swedes don't lunch between 12 pm and 2 pm

And isn't 10 am a little early for lunch?

## When minus is plus ...

The people who devised the maths tutoring program for the Australian Institute of Mathematics could do with some maths tutoring themselves ... as this example, captured from the program's TV ad, amply demonstrates.

### HOW ABOUT A LITTLE HELP?

The prize for best entry goes to V Ward. Thanks to A Brehaut, K Crimmin, T & A Woods (x2!), R McGrath, A & L Kelly, B Berghout and R Davis for their contributions to this month's Hard Word. Please keep them coming.

If you have any examples you think deserve to be on this page, send them to *The Hard Word*, CHOICE, 57 Carrington Road, Marrickville 2204.